Single Source Safety Program Document
United States Army Signal Center and Fort Gordon
Fort Gordon, Georgia 30905-5000

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Safety

FORT GORDON SAFETY PROGRAM

Summary. This document provides policy, defines responsibility, prescribes criteria, and outlines guidance for the development, implementation and evaluation of the Fort Gordon Accident Prevention program.

Applicability. This document applies to all elements of the U.S. Army Signal Center and Fort Gordon (USASC&FG), to tenant activities, and to U.S. Army Reserve and Army National Guard units supported by Fort Gordon. Tenant Commands may establish host tenant agreements to cover specific issues necessary to implement their accident prevention programs in accordance with requirements unique to their MACOMs.

Supplementation. Supplementation of this document is prohibited without prior approval from ATZH-PSB.

Suggested improvements. The proponent of this document is the Signal Branch Safety Division, Directorate of Public Safety, USASC&FG. Users may send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through channels to Commander, USASC&FG, ATTN: ATZH-PSB, Fort Gordon, GA 30905-5000.

Contents

CHAPTER 1
INTRODUCTION

1-1. Purpose.

To prescribe policies, procedures, and guidelines for implementation of the U.S. Army Signal Center and Fort Gordon (USASC&FG) Safety and Occupational Health Program.

1-2. Policy.

To implement an accident prevention program that will reduce manpower and materiel losses. Decision makers at all levels will employ risk management approaches to preclude unacceptable risks to the safety of personnel and property.

1-3. References. Appendix A.

1-4. Definitions and Abbreviations. Appendix B and C.

1-5. Responsibilities.

a. The Commanding General, USASC&FG, has overall staff responsibility for the Safety and Occupational Health Program. The Installation Safety and Occupational Health Manager acts for the Commanding General in discharging this responsibility.

b. The Installation Safety and Occupational Health Manager will:

(1) Implement and manage all aspects of the Army Safety Program for this installation as outlined in AR 385-10, The Army Safety Program. and TRADOC Regulation 385-2, The TRADOC Safety Program.

(2) Convene the Fort Gordon Safety and Occupational Health Advisory Committee Meetings.

c. The Director of Public Safety will:

(1) Support safety investigations to include providing a completed DA Form 3946, Military Police Traffic Accident Report to the Installation Safety and Occupational Health Manager.

(2) Provide the Installation Safety and Occupational Health Manager with a daily summary of accident information collected through Military Police channels, (for example, Military Police (MP) blotters and traffic accident reports).

(3) Advise the Installation Safety and Occupational Health Manager of adverse road conditions.

d. The Directorate of Public Works (DPW) will:

(1) Coordinate DA Forms 4283, Facilities Work Requests, with the Signal Branch Safety Division (SBSD) for identification of safety related deficiencies.

(2) Consolidate deficiencies, where correction exceeds local capability, into projects for Department of Army funding.

(3) Correct without delay work requests identified by the SBSD as immediately dangerous to life and health (IDLH).

(4) Provide the SBSD and PMS a monthly status report identifying work orders of safety or health concern, to include correction status.

(5) Coordination with the SBSD and PMS in the design, construction, and renovation of new or existing facilities to ensure compliance with OSHA and other applicable standards.

(6) Provide the SBSD with DA Form 461-5, Vehicle Classification Inspection, and SF 91, Operator's Report of Vehicle Accident.

(7) Ensure that DD Forms 1348-6, non-NSN Requisition, or DA Forms 3953, Purchase Request and Commitment, for all hazardous chemicals/materials include the required information IAW AR 700-141.

e. The Dwight David Eisenhower Army Medical Center (DDEAMC) will:

(1) Perform those functions outlined in AR 40-5, Preventive Medicine Services.

(2) Upon request from the SBSD, support accident investigations to include evaluation of human and environmental factors that contributed to the accident.

(3) Provide the SBSD a copy daily of the Admissions and Disposition Sheets.

(4) Coordinate with the SBSD the applicable aspects of the industrial hygiene surveys.

(5) Publish bloodborne pathogen and chemical hygiene plans to cover their activities.

(6) Provide or review bloodborne pathogen plans for first responders.

f. The Directorate of Human Resources (DHR) will:

(1) Inform supervisors of the established administrative penalties for civilian abuses of the required programs contained within this document.

(2) Coordinate with the SBSD on all aspects of the Federal Employees Compensation Program to reduce unnecessary and lengthy lost workday claims.

(3) Consult with the SBSD before completion of the safety aspects of employee organization contracts.

(4) In coordination with supervisors, assure that new employee job descriptions identify hazards to which the employee may be exposed and the requirement for wearing personal protective equipment. Update existing job descriptions during the recruiting process to reflect this information.

(5) Ensure union notification of any change in policy, practice, or working condition provided by the SBSD.

(6) Advise the SBSD staff of the dates and times of new employee orientations sponsored by the DHR.

g. The Director of Contracting (DOC) will:

(1) Include safety provisions in commercial contracts.

(2) Advise construction contractors during preperformance conferences that all accidents involving construction contractor employees must be reported promptly to the Contracting Officer.

(3) Assist in the enforcement of contract safety requirements through close coordination with the SBSD, DPW inspectors, Contracting Officer's Representative (COR), and contract administrators.

(4) Include in each contract or purchase order for hazardous material, a requirement for the supplier to give Material Safety Data Sheets (MSDSs), to the Contracting Officer 5 days before shipment of the material. A copy of the MSDSs will be forwarded to the SBSD.

h. Commanders and directors will:

(1) Implement a comprehensive safety program within their organization, IAW AR 385-10 and this document.

(2) Publicize channels for reporting unsafe and unhealthful working conditions, emphasizing personal responsibility for making such reports.

(3) Establish procedures to ensure that all job descriptions adequately reflect all safety responsibilities and requirement for the position.

(4) Include safety practices and physical standards in all directives, standing operating procedures (SOPs), and training doctrine. Prepare a comprehensive SOP for each hazardous operation (for example, range operations, vehicle operations, welding, tire changing, use of simulators, Field Training Exercise (FTX) operations, battery charging and storage, bivouac areas, fuel storage/refueling operations, storage and handling of ammunition and explosives, loading, storage, and handling of chemicals, communications and electronics, spray painting, etc.). SOPs will contain details of operation procedures, emergency procedures, training received, and required inspections as well as other applicable information.

(5) Develop and implement a comprehensive accident prevention plan encompassing all operations and activities under their control. Establish specific written safety goals for their organizations.

(6) Include safety objectives in all civilian supervisors' performance plans, officer evaluation support forms, evaluation report system. Samples are available from the SBSD. Objectives need not be stand alone elements.

(7) Receive a safety orientation from the SBSD within 14 calendar days of assignment to a unit or directorate.

(8) Maintain copies of each unit/directorate/activity safety program publication for review by the SBSD. Examples are:

(a) Standing operating procedures.

(b) Safety committee meetings minutes.

(c) Risk assessments.

(9) Identify and eliminate hazardous conditions.

(10) Require rigorous enforcement of the use of required personal protective clothing and equipment (PCE).

(11) Appoint a collateral duty officer or NCO in the rank of E-6 or above or equal civilian as the unit Safety Officer/NCO. Ensure that safety officers/NCOs receive training in their safety related duties.

(12) Provide a copy of Safety Officer/NCO appointment orders to the SBSD, ATTN: ATZH-PSB.

(13) Report all Class A and B accidents immediately to the SBSD and all other accidents within 21 calendar days from the date of the accident. Reports will be completed IAW AR 385-40 and this document.

(14) Appoint a safety committee at brigade and directorate level, as a minimum. In units of less than 30 persons appointment of a Safety Officer/NCO will be sufficient.

(15) Provide safety briefings to all personnel before holidays.

i. Supervisors and operating personnel will:

(1) Ensure the work environment complies with applicable safety standards and regulations, and personnel perform all operations in the safest possible manner, including the use of PCE provided for their protection.

(2) Be responsible for accident prevention to the same extent as for production and services.

(3) Procure, maintain in sanitary working condition, and require use of PCE and devices necessary to protect employees. This includes the training of the employees.

(4) Report unsafe conditions in the workplace to the SBSD. When external support (Engineer, Logistics, etc.) is needed to correct a deficiency, initiate the necessary corrective action (DA Form 4283, Facilities Engineering Work Request, telephone call to the DPW Service Order Desk, etc.) and inform the SBSD.

(5) Promptly evaluate and take action, as required, to correct hazards reported by employees or identified through accident investigation. Reprisal action will not be initiated or supported against employees who identify hazards, raise safety concerns, or engage in authorized safety and occupational health activities.

(6) Orient all newly assigned personnel concerning the hazards inherent in their job and work environment. Conduct regular training concerning specialized and general hazards in the workplace and methods for avoiding accidents.

(7) Report all accidents promptly, IAW chapters 4 and 5, AR 385-40 and the Guide for Supervisors, Federal Employees Compensation Act (FECA) published by DHR.

(8) Ensure that injured employees report to the Emergency Room of Dwight David Eisenhower Army Medical Center (DDEAMC)for evaluation of the injury before seeking off post treatment, IAW Guide for Supervisors, Federal Employees Compensation Act (FECA) published by DHR. Serious injuries may be treated and stabilized at DDEAMC if medically necessary.

(9) Ensure that job descriptions accurately describe the hazards to which an employee may be exposed and all physical requirements for the position. All personnel actions involving these positions should indicate the hazards.

(10) Ensure that all employees receive required medical surveillance and pre-employment and pre-retirement physicals.

j. Collateral Duty Safety Officers/NCOs will:

(1) Become familiar with Army safety regulations, and safety aspects included in SOPs, field manuals, technical manuals, etc. Attend training class at the SBSD as soon as possible following their appointment.

(2) Interpret safety policies and procedures for their unit commander.

(3) Conduct quarterly safety inspections of their areas.

(4) Provide prompt assistance with accident investigation and reporting IAW AR 385-40 and Chapter 4 of this document.

(5) Maintain unit safety records and analyze the unit's accident experience to determine accident patterns.

(6) Conduct periodic briefings.

(7) Provide the commander/director with periodic safety progress reports and information concerning accidents.

(8) Arrange for the incorporation of safety practices in operating procedures, training publications, demonstrations, and exercises to ensure the safety of Army personnel and the public.

(9) Determine the need for and obtain material for safety training, safety promotions, and safety awards.

k. The employee will:

(1) Comply with the USASC&FGSafety Program.

(2) Observe rules and regulations relating to their personal job safety, including the use of PCE provided by the supervisor. The employee will maintain the PCE in a clean and sanitary manner. Willful disregard of or failure to use safety equipment or devices may be grounds for disciplinary action.

(3) Report unsafe conditions to immediate supervisors for correction.

(4) Provide complete and unbiased information during accident investigation, when required.

CHAPTER 2
COUNCILS/COMMITTEES AND TRAINING REQUIREMENTS

2-1. General.

The Fort Gordon Safety and Occupational Health Advisory Council (SOHAC), was established to enhance the accident prevention program, unit safety committees, and training programs for personnel.

2-2. Safety and Occupational Health Advisory Council. The SOHAC will meet to review the accident experience of the command and suggest countermeasures for implementation. Membership will consist of the Garrison Commander and directors or their representatives; commandants, commanders, directors or assigned representatives of tenant activities; union representatives, the Industrial Hygienist, Occupational Health Supervisor; Chief of Preventive Medicine Activity; Aviation Safety Officer; Range Safety Officer and Environmental Engineer. The council meeting will be chaired by the Garrison Commander. SBSD is responsible for planning meetings and providing council members with appropriate information. Each member of the council will be notified of the time and date of the meeting. Special meetings should be called when critical and urgent safety problems arise. The SBSD will forward a copy of the minutes to all council members.

2-3. Collateral Duty Safety Officer/NCO Course.

a. The SBSD will conduct the Collateral Duty Safety Officer/NCO Course for military and civilian safety officers/NCOs.

b. All personnel assigned safety officer/NCO duties will attend the course. Requests for attendance will be submitted to the SBSD, ATTN: ATZH-PSB.

2-4. Safety Briefing. Directors/commanders will report to the SBSD for orientation within 14 days of assignment. All reserve unit safety officers participating in annual training at Fort Gordon will receive a briefing by SBSD personnel.

2-5. Safety Training Requirements.

a. The SBSD staff will assist DHR in conducting the safety portion of the new employee orientation sponsored by the DHR.

b. Commanders/supervisors will present a safety briefing to all newly assigned personnel within 30 days of arrival. Material covered will include the individual's safety rights and responsibilities and information on the hazards in the area.

c. Specialized on-the-job safety training of employees will be done by the supervisor. This training will include, but not be limited to, precautions to prevent injuries from hazardous machinery and equipment, dangerous chemicals, and hazardous operations and required PCE.

d. An Occupational Safety and Health Administration (OSHA) Poster, available from the SBSD, will be posted in each workplace. This poster explains employee rights and responsibilities delineated by Public Law 91-596.

g. Collateral Duty Safety Officer/NCO Meetings. Regular meetings with safety officers and key personnel will be conducted by major organizations to provide safety officers at the next lower command with current safety guidance. Meetings conducted by major subordinate unit safety officers will be documented.

h. Holiday Safety Requirements. Special safety orientations/seminars will be conducted by commanders before holiday weekends. Safety orientations/seminars should include but are not limited to the following identification of seasonal hazards associated with holiday driving, recreational activities, fatigue, the over-consumption of alcohol, and the effects of prescription medication and over-the-counter drugs. Safety inspections of privately-owned vehicles must be conducted at least twice a year and at more frequent intervals at the discretion of the commander.

2-6. Bulletin Boards. Each company/directorate/division or branch will devote a part of their bulletin board to display safety and health materials. Safety posters will be strategically placed throughout the area. Posters are available from the SBSD. Posters designed by members of the unit and oriented toward unit needs are normally more effective than stock posters and should be used whenever possible. Posters lose their effectiveness rapidly and should be replaced frequently.

CHAPTER 3
HAZARD IDENTIFICATION

3-1. Inspections. Safety inspections must be conducted at all levels. Minimum requirements for safety inspections are as follows:

a. All personnel will, during the performance of their normal duties, survey their operations, activities, facilities, equipment, and procedures for safety hazards and initiate or recommend necessary action to eliminate any hazards.

b. SBSD personnel will inspect work sites annually using the Standard Army Safety and Occupational Health Inspection procedures described in AR 385-10. High hazard areas may be surveyed more frequently. Collateral duty safety officers will inspect office and classroom facilities. Inspections may be conducted with or without prior notification.

(1) A written report of deficiencies observed during the inspection will be provided to the commander/director of the activity inspected.

(2) The unit/activity inspected will be required to respond to the SBSD in writing concerning corrective action taken on each cited deficiency. Follow-up procedures must be established by the unit to ensure correction of each deficiency. A record of uncorrected deficiencies will remain in an active file and reviewed periodically until corrections are complete.

3-2. Abatement Plans.

a. DoD and the U.S. Army require an abatement plan for all violations in categories I - IIIB, requiring more than 30 days to correct. See AR 385-10 for procedures to follow.

b. Any risk assessment Code (RAC) I or II safety hazard that requires an engineer work request to correct will be forwarded through the SBSD by the activity responsible for correcting the problem. The SBSD will assign a priority to the work request and track the hazard.

3-3. Reports of Unsafe or Unhealthful Working Conditions.

a. Reports of unsafe or unhealthful working conditions should be handled at the operational level whenever possible to ensure timely correction. The following order should be followed whenever possible:

(1) Oral reports directly to the supervisor.

(2) Reports through operational channels.

(3) Phone call or memorandum to the SBSD.

(4) Fort GordonSafety Hotline (791-7233).

(5) The Army Hazard Reporting System (AR 385-10).

b. All Department of Army (DA) personnel, both military and civilian, will be protected from coercion, discrimination, or reprisals for participating in the Army Safety and Occupational Health Program and exercising lawful occupational safety and health rights.

c. Persons submitting signed reports who request anonymity will not be revealed by the SBSD to anyone other than the necessary members of the safety staff. Disciplinary action will be taken against those violating this prohibition.

d. Reports that appear to involve immediate life-threatening situations will be investigated immediately by qualified safety and health officials.

CHAPTER 4
INVESTIGATION/REPORTING OF USASC&FG ACCIDENTS AND CENTRALIZED ACCIDENT INVESTIGATION OF GROUND (CAIG) ACCIDENTS

4-1. General. The commander or supervisor directly responsible for the operation, materiel, or person(s) involved in an accident will ensure the preparation of the appropriate report on each accident IAW instructions in this document, Guide for Supervisors, Federal Employees Compensation Act (FECA), and AR 385-40. DA Form 285 will be forwarded to the SBSD not later than 21 calendar days following the date of the accident. Reports will be reviewed at each level of the unit, directorate, and activity chain of command. Major unit commanders/directors will sign block 66 of DA Form 285. Once installed, Fort Gordon organizations and all tenants will use the PC Safety portion of the Sustaining Base Information System (SBIS) Safety Installation Support Module, automated accident reporting system. This applies to all accidents ground or aviation.

4-2. Mileage Report. The Transportation Motor Pool will report monthly the number of miles driven by military/General Service Administration (GSA) vehicles to the SBSD not later than the fifth working day of the month.

4-3. Centralized Accident Investigation (Ground) (CAIG):

a. Class A or B on-duty accidents as defined in AR 385-40 will be investigated by a CAIG Board unless otherwise shown below.

b. Tenant activities that report to a MACOM other than TRADOC will comply with the requirements of that MACOM.

4-4. Immediate notification.

a. During duty hours, the first commander in the chain of command who becomes aware of a Class A or B accident will notify their next higher chain of command and the SBSD at extensions 791-3227/7233. During non-duty hours, they will notify the MP Operations Desk at extension 911.

b. During duty hours, the SBSD will notify the following agencies of any Class A or B accident:

(1) Safety Office of the involved MACOM.

(2) TRADOC Safety Office, AUTOVON 680-3357.

(3) U.S. Army Safety Center Operations, AUTOVON 558-2660/4273.

c. As a minimum, notice should include the information below; but notification will NOT be delayed because certain elements are unknown.

(1) Date and time of the accident.

(2) Name, social security number, unit of personnel, and unit identification code.

(3) Extent of injuries and/or damages and location.

(4) Type and location of accident and disposition of injured persons and damaged property.

(5) Hazardous/sensitive materials involved.

(6) Weather conditions at time of accident.

(7) Brief synopsis of event. (Include whether alcohol/drugs involvement. For motor vehicle accident, include whether the individual was wearing seatbelts and had received accident avoidance training.)

(8) Point of contact and telephone number.

4-5. Accident Investigation Boards.

a. On-duty Class A/B accidents will be investigated by a CAIG investigation board. All CAIG investigation boards will employ general use accident investigation procedures IAW AR 385-40, unless directed to do a limited use accident investigation by the TRADOC Command Safety Office. The board will be appointed by the Installation Commanding General.

b. Investigation reports will include accident causes, contributing factors (if any), actions recommended, and actions taken (for example, changes in local procedures, changes in training, doctrine or material). An Equipment Improvement Report (EIR), or Quality Deficiency Report (QDR), will be completed when materiel failure is a cause or contributing factor.

c. The Installation Commander will appoint an accident investigation board for all on duty Class A and B ground accidents except those investigated by the U.S. Army Safety Center Accident Investigation Board and those involving Privately Owned Vehicle (POV) off-duty fatalities.

d. The accident investigation board will consist of three members. Additional persons may be appointed, as needed, for technical expertise. Members of the board will be selected from organizations other than the unit sustaining the accident. The president of the board will be a field grade officer.

e. The investigating board will investigate to determine the causes of the accident and make recommendations to prevent recurrence of a similar accident. A report format guide and format for appointment orders of CAIG boards may be obtained from the SBSD.

f. The board's written report will be kept confidential and will be handcarried by the president of the board to the major subordinate unit commander for technical review and further staff action. One copy of the report will be handcarried to the commander of the unit experiencing the accident. The commander of the unit experiencing the accident will complete DA Form 285, affix it to the report of investigation, and prepare a letter of transmittal that shows concurrence or non-concurrence and actions taken at their level to prevent similar accidents. Sufficient copies of the report will be made to allow the original and two copies to be forwarded to the SBSD and to provide a file copy for the major subordinate unit and the unit experiencing the accident. All DA Form 285's for Class A or B accidents will be reviewed and signed by the Commanding General, Deputy Commander or Chief of Staff, USASC&FG before being sent to the SBSD. Neither the written report or the DA Form 285 may be used in disciplinary action.

4-6. Responsibilities:

a. Commanders will initiate the following actions upon learning of a Class A or Class B accident:

(1) Ensure incidents or events listed in AR 190-40 are reported to the military police station.

(2) Coordinate all actions with appropriate authorities for accidents occurring in areas not under Army control.

(3) Identify witnesses and have initial statements prepared.

(4) Secure operational, maintenance, and historical records of equipment involved.

(5) Secure training and personnel records of Army military/civilian personnel involved in the accident.

(6) Obtain and hold fuel and oil samples from Army motor vehicles or Army combat vehicles involved in the accident.

(7) Ensure that blood and urine samples are obtained and held, from all U.S. Government personnel involved in the accident. Samples should be obtained by consent. If consent is refused, advice should be obtained form the Office of the Staff Judge Advocate or the OSJA Duty Officer on call.

b. Military Police will:

(1) Provide accident site security.

(2) Ensure the accident site is not disturbed until photographs are taken and the accident team arrives.

c. DDEAMC will:

(1) Provide evacuation and treatment of injured personnel.

(2) Secure medical records of personnel involved.

(3) Obtain and refrigerate blood and urine samples from Army equipment operators, victims, and other personnel who had a direct involvement in the accident.

d. DPW will minimize environmental damage. Cleanup of hazardous material spills will be accomplished as soon as possible. If a hazard exists, cleanup will take precedence over preservation of accident site.

e. The SBSD will:

(1) Serve as safety point of contact for the board.

(2) Ensure preliminary actions are initiated.

(3) Process information concerning the accident to HQ TRADOC.

(4) Coordinate the activities and reports prepared and submitted by all agencies concerning the accident, and send reports to the TRADOC Command Safety Office.

f. Adjutant General will:

(1) Publish orders for the investigation board to include those members from U.S. Army Safety Center.

(2) Provide for administrative support, to include office space with AUTOVON telephones, reproduction machine capability, and essential typing support.

g. DPW will provide logistical support including equipment to recover wreckage when it is authorized to be moved. Provisions will be made for a suitable and secure area for storage and technical inspection of the wreckage.

4-7. Findings and Recommendations. Responsible commanders will be briefed on tentative findings and recommendations at the conclusion of the field portion of the investigation.

4-8. Collateral Investigation under Provision of AR 15-6.

a. U.S. Army Safety Center investigation does not relieve commanders of the requirements to conduct a collateral board investigation IAW AR 15-6. The collateral board will not interview witnesses or disturb the accident site until authorized to do so by the U.S. Army Safety Center Accident Investigation Board President.

b The CAIG Program will not interfere with, impede, or delay Law Enforcement Agencies in the execution of regulatory responsibilities. IAW AR 195-2, Criminal Investigation Activities, Law Enforcement Agencies have priority to witness and accident site access.

CHAPTER 5
ARMY MOTOR VEHICLE/PRIVATELY-OWNED VEHICLE ACCIDENT PREVENTION PROGRAM

5-1. General. Army motor vehicle (AMV) and privately owned vehicle (POV) accidents constitute one of the Army's most repetitive causes of fatalities and serious injuries. While commanders/supervisors do not control POV operators similar to those operating AMVs, there are numerous areas of influence which may be used to reduce manpower losses. The three primary areas in which command direction will be applied to reduce the potential of injury and property damage are: AMV driver selection, driver training, and vehicle inspection.

5-2. Responsibilities

a. Unit and activity commanders will select, train, and license AMV drivers IAW ARs 385-55, 600-55 and 190-5.

b. The Safety Office will have oversight over accident avoidance training.

5-3. Accident Avoidance training. All operators of Army motor or GSA vehicles must successfully complete the Army Driver Improvement Program or equivalent every 4 years. This program will conducted at the Company level of operations.

5-4. Unsafe operations. Drivers will not operate any Army or GSA motor vehicle in an unsafe mechanical condition or in an unsafe manner. Such conditions include:

a. Improper functioning of lights, windshield wipers, or mirrors.

b. Broken, cracked, or frost/ice/snow-covered windshields.

c. Failure to use safety equipment, etc.

5-5. Preholiday POV Inspections/Program.

a. Commanders/supervisors will encourage personnel to have their POV inspected prior to all 3-day holidays.

b. Items recommended for inspection are:

(1) Proper functioning of restraining devices.

(2) Tire tread depth.

(3) Lights, horn, and windshield wipers (operation and efficiency).

(4) Shock absorber performance.

c. All commanders will conduct a risk analysis of their personnel using the Accident Risk Assessment and Control Options - POV Programs (available from the IBSO) prior to holiday periods or any uptempo operations including the receipt of new personnel to thier organization. Copies of the resultant risk analysis will be maintained by the Commander within the individuals organizational file and updated at least every 90 days. Commanders will implement selected control measures from the Accident Assessment and Control Options program to reduce or maintain a low level of risk.

5-6. DA Form 348, Documentation. Include the following information as a minimum on DA Form 348:

a. Army Driver Improvement Program training and date.

b. Safety awards.

c. AMV accidents.

d. Civilian and military traffic points and citations.

e. Operator's training completed.

5-7. Safety Belts.

a. All personnel operating or riding as a passenger in an Army motor or GSA vehicle will wear manufacturer-installed safety belts whether on or off the installation. Individuals will not
ride in seats from which manufacturer-installed occupant restraints have been removed or rendered inoperative. The vehicle operator is responsible for informing passengers of the safety belt requirement. The senior occupant is responsible for ensuring enforcement. When it is not clear who the senior occupant is in the case of civilian employees, the driver is responsible for ensuring enforcement.

b. All personnel, including visitors, will use a restraint system while driving or riding on the installation in a privately owned or Government-owned/leased vehicle with manufacturer-installed restraint systems.

5-8. Motorcycle Safety and Training.

a. Each driver of a privately or government-owned motorcycle or moped is required to satisfactiorily complete an Army-approved motorcycle safety course prior to registering their vehicle on the installation. The course consists of four-hours of classroom instruction and four-hours of hands-on training. Course is offered both on- and off-duty and is available to all Fort Gordon personnel.

b. The Signal Branch Safety Office (SBSO), in conjunction with the Georgia State Patrol will offer the Army-approved, Motorcycle Safety Foundation Experienced Rider Course on at least a quarterly basis. Pre-registration for the class is required by contacting the Motorcycle Safety Program Coordinator at 791-7233 or 791-3227. An additional off-duty learn to ride course is also available to Fort Gordon personnel.

c. Operators of privately or government-owned motorcycles and mopeds must be licensed by civil authorities to drive on public roadways.

d. Motorcycles and mopeds must have headlights turned on at all times while in operation and be equipped with two rearview mirrors, one on each side of the handlebars.

e. All motorcycle operators and their passengers will wear an approved motorcycle helmet at all times. Helmets must meet DOT, Snell Memorial Foundation, or American National Standards Institute (ANSI) standards for helmet construction. Helmets will be properly fastened under the chin.

f. All motorcycle operators and passengers must use eye protection devices when operating or riding a motorcycle. Suitable eye protection is defined as a clear, shatterproof goggle or face shield which is attached to the helmet. A motorcycle or moped windshield or fairing is not considered proper eye protection.

g. All soldiers will wear long-legged trousers, high-visibility garments (bright color for day and retroreflective for night); a long-sleeved jacket, all made of leather, denim, or a similar durable material; full fingered gloves; and leather boots or sturdy over-the-ankle footwear with a heel whenever they operate or ride a motorcycle or moped. Civilian personnel must wear the same protective clothing specified for soldiers when operating or riding a motorcycle or moped on the installation or while on official Government business off the installation.

h. The use of headphones or earphones while driving a motorcycle or moped is prohibited.

5-9. Maximum Driving Time. Drivers will not be assigned to drive an AMV for more than 10 hours in any 24-hour time period. If more than 10 hours is needed to complete operations, a qualified assistant driver must be assigned to each vehicle. This same restriction is recommended for personnel operating their POVs.

5-10. Bicycle Helmets. DODI 6055.4, DoD Traffic Safety Program, emphasizes the mandatory use of approved (i.e., American National Standards Institute (ANSI) or the Snell Memorial Foundation) bicycle helmets by all personnel (including dependents) who ride bicycles on DoD installations. Workers operating bicycles in areas that require the use of ANSI-approved helmets (hard hats) for protection from falling and flying objects are allowed to use those helmets instead of approved bicycle helmets.

CHAPTER 6
LIGHTNING PROTECTION

6-1. Troop Precautions. Notifications of severe weather will be provided in accordance with the HQ, USASC&FG Severe Weather Emergency Action Plan (SWEAP). However, commanders at all levels should be cognizat of weather situations around them that may be threatening to their troops. Up-to-date weather information/forecasts may be obtained by contacting the National Weather at 724-0056, checking the weather channel 17, contacting the Plans, Operations, and Training Division, DPTM at 791-3531 or via the Internet at http://www.weather.com/weather/uscities/GA_Augusta.html. Weather intellignece data for operations areas outside the Fort Gordon/Augusta/CSRA, may be obtained by contacting the Security Division, DPS, ATTN" ATZH-PSS.

6-2. Protective Measures. In the event warning is provided of impending electrical storm or lightning is noticed in the vicinity of Fort Gordon, the unit commander, officer or NCO in charge of the training, ceremony or event, other the senior individual present will:

a. Cease all outside activity immediately.

b. Move personnel into a building, if possible.

c. Ensure all personnel remove steel helmets and stack weapons at least 50 meters away from personnel. If time is not available to stack weapons, weapons and metal helmets will be laid on the ground or on firing line rifle rest, within view of where troops will be located.

d. If a building is not available, move personnel into dense woods, a low area, or to the foot of a steep hill.

e. Ensure all personnel are moved away from fences, electrical wiring, vehicles, masses of metal, or other possible conductors of electricity.

f. Ensure personnel remain in building or other safe area until the lightning has ceased.

g. When marching in formation, troops will increase the minimum distance and interval to twice that normally maintained.

h. Radios will not be used, nor will troops carry radios with antennas extended.

i. Troops will be evacuated from areas containing television antennas, relay antennas, or vehicles with whip antennas.

j. Personnel will dismount from dozers, graders, and all other metal machinery and move to a safe distance (for example, approximately 100 yards, depending upon terrain and conditions).

k. Personnel will not huddle together, if unavoidably caught in flat, open space, or on a bare hilltop. Instead, scatter to reduce the attraction of lightning to a mass of bodies.

l. Restrict the use of telephones, computers and other electrical devices.

6-3. Lightning Casualties. Immediate attention should be directed to those who may appearto be dead. Individuals who are stunned or dazed but moving about can usually recover alone, but should be examined by medical personnel as soon as possible. Those whose breathing and/orheartbeat have stopped need immediate attention. Should such a casualty occur, a qualified person should begin artificial respiration and cardiopulmonary resuscitation, treat for shock, and evacuate to the nearest hospital emergency room.

CHAPTER 7
HEAT STRESS INJURY PROGRAM

7-1. General

a. Excessive exposure to high temperatures during the summer months can pose serious health risks to individuals who are not properly prepared to deal with situation. It is important to remember that the heat injuries discussed may occur indoors, as well as, outdoors. All heat injuries are preventable and can be avoided by following the guidance in this program and TB MED 507, Prevention, Treatment, and Control of Heat Injuries.

b. Commander/Director must designate, either verbally or in writing, all "mission essential" personnel by name or position that will report to work regardless of the temperature or relative humidity.

7-2 Responsibilities

a. The PMS will monitor the WBGT to offer a baseline reading for the installation. Units training on Fort Gordon should not rely solely on this monitoring for training that takes place outside the cantonment area. PMS may be called directly to receive the most current WBGT reading Monday - Friday 0800-1600 at 787-HOTT. PMS will notify SBSD when the readings reach category IV and V. Upon request, PMS will monitor indoor temperature and relative humidity in buildings that have heat generating operations.

b. The SBSD will telephonically advise the Garrison Headquarters, 513th MI Brigade, and major tenant activities when the heat category is IV and V.

c. The DHR will notify the appropriate unions when the decision is made to dismiss civilian personnel.

d. Directors/supervisors will take precautions and administrative action as required for outdoor and indoor work under excessive heat to include procedures for acclimatization.

e. Directors/supervisors will ensure that new personnel follow acclimatization procedures.

7-3. Heat Injuries

a. Heat Cramps - Heat cramps are not a life threatening condition. Muscle cramping in the major extremities and the abdomen is a sign of heat cramps. The pain associated with heat cramps can vary anywhere from mild discomfort to severe pain if the symptoms are not treated immediately and properly. An excessive loss of salt and water from the body does not directly cause heat cramps. The cramping that occurs is the result of an unequal distribution of salt and electrolytes inside the body. Resting the muscles, loosening tight clothing, and consuming at least 1 liter of water, the individual will usually be free of symptoms in about 30 minutes. Consuming salt tablets should be avoided.

b. Heat Exhaustion - The most common of the heat injuries is heat exhaustion. Heat exhaustion, unlike heat cramps, is the result of an excessive loss of both salt and water from the body. The condition itself is not life threatening, as long as, immediate and proper care is given to the individual. Early signs are fatigue, dizziness, disorientation, tingling in the hands and feet, nausea, vomiting, rapid pulse, rapid shallow breathing, and possibly unconsciousness. Proper treatment includes removal from the hot environment, loosening of tight clothing, and consumption of as much fluid as comfortable, if conscious. Never force fluids into an unconscious person, this can cause aspiration of fluid into the lungs resulting in suffocation.

c. Heat Stroke - Heat stroke is the most serious heat injuries. If not treated immediately and properly, death can occur within minutes. This condition is the later stage of heat exhaustion. Heat stroke is the result of the bodies cooling mechanism completely shutting down. There is no more water in the system for the body to perform sweating and evaporation, and as a result the blood vessels in the body can no longer supply the internal organs with an adequate amount of blood and they begin to die. Symptoms of heat stroke will include, massive headache, cherry red skin, fast thready pulse, increased respirations, cessation of sweating, and a high body temperature. Immediate transport to a hospital is crucial, and steps to lower the body temperature should be taken. Remove constricting clothing, apply cool, damp clothes to skin, fan the body. First response measures should not interfere with transport.

7-4. Prevention of Heat Injuries

a. Heat injuries can be avoided if personnel are properly informed and equipped before conducting any type of physical activity in hot climates. It is important to realize that all individuals will respond to heat stress in different manners. Before beginning to work in a hot environment, all personnel should be given a period of approximately 2 weeks in which they can begin to adjust to the heat. Work and rest schedules should be devised according to the temperatures to which individuals are exposed.

b. Individuals must consume water regardless of thirst. Continuous water consumption is the best preventive measure available. It is the supervisor's responsibility to ensure that clean potable water is always available to personnel. It cannot be stressed enough that each person will respond to the heat in their own way. Supervisors must constantly monitor their personnel. Supervisors must be aware of individuals with previous heat injuries because they are at a greater risk for future problems.

7-5. Wet Bulb Globe Thermometer Index

a. The Wet Bulb Globe Thermometer (WBGT) Index is a portable measurement device to record air temperature, air movement, relative humidity, and radiant heat. Readings are computed using a stationary wet bulb thermometer exposed to the sun and winds, a six inch black globe thermometer and a dry bulb thermometer shielded from the direct rays of the sun. The device must be located in an area similar to the conditions in which personnel will be exposed. A detailed description of the proper use of the WBGT can be obtained in TB MED 507, Appendix A.

b. WBGT monitoring kits are available to all military units through normal supply channels. All units are highly encouraged to obtain a WBGT kit. The NSN for this equipment is 6665-00-159-2218.

c. The following heat categories will be used to determine the appropriate duration and type of work under extreme heat conditions:

1) If the WBGT Index 82 degrees F (CAT II), caution must be used in planning/execution of heavy work or exercise for troops/workers who are not accustomed to the heat. Adequate amounts of potable water must be made available at all times to all personnel.

2) When the WBGT Index reaches 85 degrees F (CAT III), strenuous work should be suspended for individuals with less than approximately 2 weeks of exposure to the hot environment. After a two week period of adjustment, work may be continued at a reduced scale. The frequency and/or duration of rest and relief periods should be increased. Constant water consumption should be a priority and the uniform should be modified appropriately.

3) When the WBGT Index reaches 88 degrees F (CAT IV), strenuous work should be curtailed for all personnel during the adjustment period. Individuals who are in good physical condition can continue to work at a reduced scale at a WBGT of 88 degrees F to 90 degrees F for periods not exceeding 6 hours a day. The frequency and/or duration of rest or relief periods should be increased. Constant water consumption should be a priority and the uniform should be modified appropriately.

4) When the WBGT Index reaches 90 degrees F (CAT V), nonessential or non-mission work should be halted. All mandatory work should be attempted indoors if possible. Water consumption is crucial at all times, and clothing must be modified appropriately.

7-6. Limitations of WBGT. The WBGT is designed to produce environmental readings, personnel operating the unit must be aware that there are many factors that can affect the accuracy of the device, and that the device does have its limitations. The WBGT should be set up in an area that is as close to the actual training/work area as possible. The WBGT reading is applicable for a 1 mile radius. Buildings, cars, pavement, soil content, elevation, or bodies of water can affect readings. Care should be taken to avoid objects interfering with the WBGT readings. The kit should be 3 feet above the ground and allowed to stabilize for 20 minutes before reading.

7-7. Personnel Working Inside

a. Guidance for dismissal of employees in government buildings states: Except for extreme emergency conditions, group dismissals will be made only from such locations that exceed temperatures of 95 degrees F and 55% humidity or higher. Equivalent combinations of temperature and humidity are:

1) 96 degrees F - 52% humidity

2) 97 degrees F - 49% humidity

3) 98 degrees F - 45% humidity

4) 99 degrees F - 42% humidity

5) 100 degrees F - 38% humidity

b. When the temperature and humidity of monitored buildings interior reach the above readings, directors and commanders will transfer employees to duties in cooler facilities. When other facilities are not available, group dismissal may be approved. Before group dismissal, the commander of the activity must be notified and permission granted. DHR must be advised so that unions can be notified prior to dismissal of employees.

CHAPTER 8
COLD WEATHER INJURY PREVENTION

8-1. General. Cold weather injuries are preventable and can be avoided.

8-2. Responsibilities.

a. Commanders will appoint a cold weather injury prevention Officer/NCO IAW Technical Bulletin Medical (TB Med) 81. Commanders also will ensure that:

(1) Safety is included in planning.

(2) Suitable cold weather gear is available and serviceable for all troops.

(3) Supervisors are trained in cold weather injury prevention responsibilities.

(4) Troops are trained in cold weather injury prevention procedures, proper cold weather operational procedures, and carbon monoxide hazards.

(5) All equipment is ready (that is, weapons winterized, tent stoves checked).

(6) Monitor weather for changes.

b. Commanders/supervisors/NCOs will:

(1) Follow guidance in TB Med 81 and other appropriate guidelines and policies to prevent cold weather injuries.

(2) Frequently observe personnel for signs and symptoms of cold injury.

(3) Encourage taking appropriate exercises to avoid constriction of the extremities by clothing and footgear.

c. Individual soldiers will:

(1) Be familiar with cold weather injury prevention procedures, proper cold weather operational procedures, and carbon monoxide hazards.

(2) Maintain cold weather gear in serviceable conditions and wear it as directed by leaders.

8-3. Prevention of Carbon Monoxide Overexposure. Commanders will ensure that:

a. Personnel are trained in the hazards of carbon monoxide as stated in TB Med 269, paragraph 7d.

b. Personnel know that the most common source of carbon monoxide is the exhaust from internal combustion engines and field heaters in confined spaces without adequate ventilation.

c. Personnel do not sleep in, on, or near fuel-powered vehicles while the engine, is running.

d. Provide adequate ventilation when engines, generators, battery chargers, and space heaters are operated.

e. Personnel are trained to recognize the warning signs and symptoms of carbon monoxide overexposure and how to perform emergency first aid treatment.

CHAPTER 9
HEARING CONSERVATION PROGRAM

9-1. Responsibilities.

a. DDEAMC will:

(1) Designate a Hearing Conservation Officer.

(2) Conduct annual surveys of potential noise-hazardous areas.

(3) Provide a list of identified hazardous noise areas to DHR and the SBSD.

(4) Inform supervisors and commanders of new noise-hazardous areas at the time of determination.

(5) Evaluate all noise hazards and make recommendations for their control, or elimination.

(6) Provide employees working in identified noise hazardous areas audiometric evaluations annually. Coordinate all necessary audiometric evaluations; and annotate individual health records accordingly. Prepare Form 1222, Record of Injury, on any significant threshold shift of 25 decibels or more in either ear at frequencies of 2000, 3000, and 4000 Hertz. Any such hearing loss will be recorded on the OSHA 200 log.

(7) Properly fit hearing protective devices.

(8) Notify employees, supervisors, and the DHR when audiometric evaluation indicates that a hearing loss exists or will be aggravated by noise exposure.

(9) Ensure all audiometer operators are certified by the Council for Accreditation in Occupational Hearing Conservation (CAOHC).

(10) Assist in hearing conservation training and education.

b. The DHR will:

(1) Ensure that employees entering or exiting identified noise hazardous positions report to PMS for pre-placement and pre-exit audiometric examinations.

(2) Assist the responsible organization in taking appropriate personnel placement action when notified by PMS that an individual has sustained a hearing loss that will be aggravated by continued hazardous noise exposure.

c. The SBSD will:

(1) Coordinate with PMS to determine the existence of noise-hazardous areas. The SBSD will provide copies of Safety and Occupational Health Inspections to the PMS that identify potential noise hazard areas.

(2) Notify responsible supervisors and unit commanders of potential noise-hazardous areas and equipment within their area of responsibility.

(3) Monitor the use of hearing protective devices to assure compliance with established regulations.

d. DPW will:

(1) Provide and maintain caution signs with the color-coding and wording specified in AR 385-30.

(2) Whenever feasible, implement engineering controls to reduce hazardous noise levels. Personal protective equipment will not be an authorized substitute for effective engineering controls.

e. Unit Commanders will:

(1) Ensure military and DA civilian personnel working in noise identified hazardous areas receive annual audiometric evaluation and hearing protection such as earmuff and/or earplugs.

(2) Take appropriate action in personnel placement when notified by PMS of the results of medical examinations, evaluations, and surveys.

(3) Ensure personnel under their command who enter noise-hazardous areas wear hearing protection while in such an area.

(4) Ensure earplugs and earplug carrying cases are part of the duty uniform for all military personnel.

(5) Ensure designated noise hazards within their command have signs visibly posted IAW AR 385-30.

f. Supervisors will:

(1) Notify SBSD of suspected noise hazards in their area.

(2) Ensure personnel under their jurisdiction comply with requirements for medical examination and wearing hearing protection.

(3) Schedule the annual audiometric evaluations of their personnel.

(4) Refer assigned/attached personnel to the appropriate medical facility for hearing problems or complaints associated with wearing hearing protection.

(5) Provide visitors entering noise hazardous areas with proper hearing protection.

(6) Ensure that only hearing protection devices approved in DA PAM 40-501 are used.

(7) Control the entrance into identified noise hazard areas by posting color-coded warning signs IAW AR 385-30. Identify noise hazardous equipment, as such, with labels IAW AR 385-30.

(8) Ensure that position descriptions and personnel actions accurately reflect the potential for exposure to hazardous noise levels for their subordinates.

g. DA civilian or military personnel employed in noise-hazardous areas will:

(1) Exercise necessary precautions and wear only authorized and properly fitted hearing protection when exposed to hazardous noise levels.

(2) Report for scheduled medical examinations, evaluations, treatment and health educations briefings concerning the hazards of noise and hearing protective measures.

(3) Report hearing problems or difficulties associated with current hearing protection to their supervisor.

(4) Comply with recommendations of medical and safety personnel regarding protection of hearing and maintenance of hearing protection.

(5) Assure hearing protection is cleaned daily and sanitized regularly.

CHAPTER 10
OCCUPATIONAL VISION PROGRAM

10-1. Responsibilities.

a. Commanders and supervisors at all levels will:

(1) Identify by name to PMS, personnel exposed to eye hazard and ensure they receive vision screening at least once every 2 years.

(2) Ensure personnel receive and properly use eye protection while in eye hazardous areas. The use of protective equipment will not be left to the discretion of the individual users.

(3) Ensure adequate illumination is provided in the workplace.

(4) Ensure contact lenses are not used during exposure to eye hazardous chemicals or air contaminants and not worn when using a respirator.

(5) Ensure eye hazard evaluations and illumination surveys are conducted when operational changes warrant.

(6) Take appropriate disciplinary action on personnel who knowingly and repeatedly violate the provisions of this section.

(7) Ensure that all personnel having useful vision in only one eye are identified and wear industrial safety glasses regardless of job assignment.

(8) Inspect and test eye lavage and showers weekly. Eye lavages must be flushed a minimum of 3 minutes weekly to eliminate the potential of eye infection during emergency use. Document test results on an MFR for each eye lavage/shower system.

(9) Ensure that individuals working in identified eye hazard areas are scheduled and report for annual eye examinations.

(10) Portable eye washes will be used only in facilities without plumbing. Only pressurized metal eye washes will be used. No portable eye wash will be put into service until approved in writing by the SBSD and PMS.

(11) Portable eye washes and showers will be inspected for proper operation monthly and the inspections will be documented.

(12) Label specific areas where the use of eye protection is required IAW AR 385-30.

b. The SBSD will:

(1) Advise commanders/directors on the Occupational Eye Protection Program.

(2) Promote compliance with the Occupational Eye Protection Program.

(3) Conduct surveys to ensure compliance with the Occupational Eye Protection Program.

(4) Inform commanders and supervisors of personnel who knowingly violate provisions of this program.

c. PMS will:

(1) Make eye examination appointments for civilian personnel working in eye hazardous areas requiring safety glasses.

(2) Assist the SBSD in promoting compliance with the Occupational Eye Protection Program and providing training on the effects of poor illumination, eye injury prevention, and the proper use, care, and storage of personal protection.

d. DDEAMC will:

(1) Provide eye examinations to military and civilian personnel who require safety glasses.

(2) Fit safety glasses.

e. Individuals will:

(1) Report for all scheduled medical examinations.

(2) Comply with the requirements for the use and maintenance of eye protection.

10-2. Materials and Services.

a. The commanders/supervisors will complete a properly funded purchase request and forward it to the Chief, Logistics Division, Dwight David Eisenhower Medical Center for procurement of safety glasses.

b. PMS will schedule individuals for appointments for eye examinations and fitting for safety glasses.

c. Personnel will be limited to one pair of prescription glasses annually unless:

(1) Glasses are broken as a result of an occupational operation.

(2) Corrective lens prescription changes.

(3) Approved by the Chief of Optometry.

(4) Assigned duties require tinted lenses for outdoor use.

CHAPTER 11
RESPIRATORY PROTECTION PROGRAM

11-1. Protective Masks (M17/M17A1). This document does not regulate the wearing and use of tactical gas masks and equipment; however, gas masks will never be used in lieu of approved respirators.

11-2. Responsibilities.

a. The Directorate of Public Safety will:

(1) Maintain records of installation respirator users.

(2) Provide respirator user training.

(3) Provide respirator fit testing.

(4) The Fire Department will provide training for firefighters using RPE and respirator specialists in coordination with SBSD and PMS as outlined in AR 11-34.

b. Preventive Medicine Service:

(1) Perform functions outlined in AR 11-34, Army Respiratory Protection Program.

(2) Provide all required medical surveillance.

(3) Provide industrial hygiene support to the Respiratory Protection Program.

(4) Provide copies of the completed OP Form 99 for each respirator user to the employee's supervisor and the SBSD.

c. DHR will:

(1) Ensure that employees entering or exiting positions that supervisors have identified as requiring the use of respiratory protection equipment report to PMS for pre-placement and pre-exit medical evaluation.

(2) Assist the responsible organizations in taking appropriate personnel placement action, when notified by PMS that an individual is medically unsuitable for employment in an area requiring the use of respiratory protection equipment.

e. DPW will:

(1) Install and maintain breathing air systems capable of providing Grade D breathing air where required.

(2) Maintain compressed air breathing system alarms.

(3) Implement a schedule of routine maintenance for servicing and inspecting airline purification panels and changing filters and cartridges as necessary.

f. Commanders, Directors and Division Chiefs will:

(1) Appoint on orders a respirator specialist, when required. Respirator specialists will be trained IAW AR 11-34 and this document.

(2) Ensure proper respiratory protection is available and used by all personnel entering or working in an atmosphere that may be considered appropriately hazardous to employee health.

(3) Ensure written SOPs include all information and guidance for proper respirator selection, use, care, and maintenance IAW AR 11-34. SOPs will be reviewed during the annual Standard Army Safety and Occupational Health Inspection.

g. Activity Supervisors will:

(1) Identify specific chemical hazards in their areas and provide appropriate personal protective equipment.

(2) Ensure that all personnel required to wear respiratory protection are identified, physically able to perform the work and use the equipment.

(3) Ensure that personnel required to wear respirators are trained IAW 29CFR1910.134.

(4) Ensure that job descriptions accurately reflect the requirement to wear respiratory protection.

(5) Complete items 1-7 on OP Form 99 for each respirator user, each chemical and each respirator.

(6) Schedule the employee for training and fit testing by contacting the PMS at 787-2517. Employee must bring the form and respirator to the SBSD at the time scheduled for training.

(7) After training and fitting schedule the employee medical surveillance with the Occupational Health Clinic. Ensure that the employee takes the form and his respirator to the appointment. Supervisors will ensure that appointments are kept.

(8) Maintain records of employee respirator training.

(9) Ensure compressed air cylinders are tested and maintained IAW 29 CFR 1910.134.

(10) Ensure breathing air will meet at least the requirements of the specification for Grade D breathing air as described in ANSI/Compressed Gas Association Specification G-7.1 per 29 CFR 1910.134.

h. Employees will:

(1) Use in all required/appropriate situations all personal protective equipment assigned to them.

(2) Maintain all personal protective equipment in a clean and safe manner.

(3) Keep all appointments made for training or medical surveillance.

11-3. Interchange of components. Components of respirators will not be interchanged/mixed with different manufacturers of components, e.g., MSA face shield with Wilson headbands, etc. Design configurations of manufacturers do not permit mixing of components and may permit the entrance of contaminants.

11-4. Storage of respirators. Respirators placed at stations and work areas for emergency use will be stored in easily accessible compartments built for that purpose and clearly marked to indicate the contents. Routinely used respirators may be stored in plastic bags; however, respirators will not be stored in such places as lockers or tool boxes unless they are in containers or cartons.

11-5. Inspection of respirators. All respirators and self-contained breathing apparatus will be inspected routinely before and after each use. A respirator or self-contained breathing apparatus that is not routinely used but kept ready for emergency use, must be inspected after each use and at least monthly to assure that it is in satisfactory working condition. Respirator inspection will include a check of the tightness of connections and the condition of the face piece, headbands, valves, connecting tube, and canisters. Rubber or elastomer parts must be inspected for pliability and signs of deterioration. Stretching and manipulating rubber or elastomer parts with a massaging action will keep them pliable and flexible and prevent them from taking a "set" during storage. A record will be kept of inspection dates and findings for respirators maintained for emergency use.

11-6. Respirator Utilization. Respirators will only be used by one individual. Use will not be shared without prior cleaning and sanitizing IAW 29CFR1910.134b(5).

CHAPTER 12
USASC&FG SAFETY AWARDS

12-1. Unit/Activity/Division Safety Awards.

a. Units having completed 1 year without a recordable accident or having reduced their previous annual losses by 20 percent without a Class A or B accident and meeting the following criteria will be awarded the U.S. Army Certificate of Merit, DA Form 1118.

(1) Accident prevention measures are integrated into training operational practices, and procedures.

(2) There is evidence of strong command emphasis in accident prevention.

(3) Accident reporting procedures and records are maintained with the highest degree of accuracy and efficiency.

(4) The commander has emphasized and controlled conditions that cause heat/cold injuries, hearing loss, and accidental injuries from failure to use seat belts.

b. DA Form 1118, Certificate of Merit for Safety, will be awarded by battalion commanders to companies and directorate chiefs to divisions and shops for completing at least 1 year of outstanding accident prevention achievement. Additional or substitute awards in lieu of the DA Form 1118 are encouraged.

c. The award will be initiated, approved, and presented by the next higher level of command.

12-2. Safety Awards for Individuals.

a. Commanders and chiefs at all levels may present a U.S. Army Safety or in-house award to individuals who have at least one accident-free year. DA Form 348 will be reviewed annually for vehicle operators by supervisors and commanders for award purposes.

b. DA Forms 1119 and 1119-1 will be awarded for individual recognition for safe vehicle operating or work practices.

c. Military drivers and mechanics may be authorized the Driver or Mechanics Badge, qualifications are listed in AR 672-74.

d. Individual Certificate of Recognition for Outstanding Safety Performance. This certificate can be awarded to an individual whose efforts on behalf of the safety program have been exemplary. Commanders/Supervisors should nominate the individuals in writing to the SBSD.

e. All safety awards will be documented in the individual's personnel file. Safe driving awards will be documented on the individuals's DA Form 348, Equipment Operator's Qualification Record.

f. Awards will be presented to recipients at suitable ceremonies to emphasize management's concern to reduce vehicle/equipment damage and personal injury losses. Directors/commanders can receive safety awards for deserving individuals by sending a memorandum to the SBSD with a short justification.

12-3. The following safety awards are available for personnel/units of the Signal Center and Fort Gordon.

a. Commanders Quarterly Award for Safety. This plaque will be presented quarterly to the Battalion within the 93d Signal Brigade, 513th MI Brigade, 15th Signal Brigade, Battalion level MI organizations, ROA, or NCOA that has shown the most significant accomplishment in safety the previous quarter. This will be a floating award that can move from unit to unit each quarter. The criteria for selection will be:

(1) Number of DWIs.
(2) No class A accidents.
(3) Military injury rate below established TRADOC goal.
(4) Safety committee in place and meeting regularly.

b. Commanders Quarterly Award for Prevention of Civilian Injuries. This plaque will be presented quarterly to the Directorate that has shown the most significant accomplishment in safety for the previous quarter. This will be a floating award that can move from directorate to directorate. Potential recipients are DCA, DPW, DHR, DOC, DRM, DOIM, DPS, RDOT, Training Departments, DPTM, DCD, and the Special Staff. The criteria for selection will be:

(1) The rate of civilian injuries is below the goal set by TRADOC.
(2) Directorate safety representative regularly attends the Safety and Occupational Health Council meetings.

(3) Positive contribution to the safety effort at Fort Gordon.

CHAPTER 13
SPECIAL EMPHASIS AREAS

13-1. Motor Pool and Maintenance Areas.

a. SOPs will be prepared, published, and posted in the work area covering potential hazards. These will include but not limited to:

(1) Painting.

(2) Using grease racks and pits.

(3) Tire changing and repair.

(4) Battery shops.

(5) Welding.

(6) Servicing brake linings and clutch pads.

(7) Equipment maintenance.

(8) Respiratory protection.

(9) Hazard communication program.

(10) Lockout/Tagout Procedures.

(11) Hearing Protection

(12) Vision Protection

b. Traffic flow in and around buildings will be carefully planned with emphasis on eliminating points of traffic conflicts, blind corners, close clearances, etc. Parking or storage of vehicles will be avoided on sloping ground, inclines, and ramps when possible.

c. Grease pits (not in use) will be protected by chains or rope barriers around the areas or by pit covers.

d. Lights and electrically operated equipment used in pits or within 18 inches of the floor of any indoor vehicle servicing area will conform with the requirements of 20 CFR 1910.307 and the National Electric Code.

e. Containers or safety cans used to hold oil and grease-soaked rags will be painted red with a yellow band around the can or with the name of the contents conspicuously stenciled or painted on the can in yellow. These cans will be emptied daily.

f. Gasoline will not be used as a cleaning solvent.

g. Solvent tanks will be equipped with a self-closing lid or fusible link. Lids will be kept closed when the tank is not in use.

h. Air used for cleaning purposes will not exceed 30 pounds per square inch. Effective chip guarding (a cone of air that directs debris forward) will be provided and eye protection will be used. Air nozzles will not be directed at personnel and horseplay with compressed gases is strictly forbidden.

i. Vehicle motors will be operated in a confined area only when necessary repairs or adjustments are being made. Adequate ventilation will be provided by use of exhaust systems, exhaust fans, or by using a tailpipe exhaust extension system that exhausts to the outside.

j. Vehicles jacked up or suspended by chain hoist will be blocked with jackstands or other substantial blocking. Personnel will not get under vehicles supported by jacks only.

k. Cranes and hoists will be operated only by trained and licensed personnel. Training will be documented on DA Form 348.

l. When inflating tires with split/locking rims, the following safeguards will be employed:

(1) Inflation safety cages will be used.

(2) A lock-on air chuck with an extension air hose at least 10 feet long, with pressure gage located in the air hose at least 10 feet from the cage, will be used.

(3) Every individual involved in tire inflation operations will be trained in proper performance of the operation.

m. Servicing brake linings and clutch disks may pose a serious hazard from airborne asbestos fibers. All such operations will be evaluated by the Industrial Hygienist and recommended protective measures will be followed.

n. All lifting devices, e.g., hoists, cranes, jacks, forklifts will be inspected, marked, load-tested, and maintained IAW requirements of TB 43-0142 and 29 CFR 1910.66.

o. Spray painting operations are prohibited inside buildings unless ventilation systems and/or paint spray booths are installed and approved by the SBSD and PMS.

13-2. Precautions Against carbon monoxide poisoning. Carbon monoxide, produced by incomplete combustion of fuels, is a serious hazard in areas where fuel-burning devices are used with insufficient ventilation. To prevent injuries from carbon monoxide:

a. Commanders and activity chiefs, as applicable, will:

(1) Request surveys by PMS to determine if a hazard from carbon monoxide exists within their areas of responsibility. Surveys should be made in shops, warehouses, and other closed areas where combustible fuel is used.

(2) Check Army vehicles, cranes, and construction equipment that use combustible fuel for defective exhaust systems.

(3) Acquaint personnel with the hazards of carbon monoxide.

b. Take precautions to safeguard personnel against carbon monoxide gas poisoning from main and auxiliary engine exhaust and fuel burning personnel heaters while operating, servicing, or being transported in motor vehicles.

c. Check vehicle exhaust systems for leaks monthly.

d. Ensure vehicle drivers do not leave parked vehicles with engines running to keep the vehicle or its occupants warm. If engine is required to operate communication equipment or for other mission related reasons, vehicles will be ventilated and operators will be required to dismount periodically.

13-3. Personal Safety Precautions.

a. All persons using installation roadways for recreational walking and jogging during hours of darkness (dusk to dawn) are required to wear reflectorized clothing. At minimum, clothing will be reflectorized, front and back, to provide motorists warning of pedestrian presence. Violators shall be reported to the PMO.

b. Joggers/runners will:

(1) Avoid jogging on streets with heavy traffic.

(2) Jog facing traffic.

(3) Jog only in single file.

(4) Wait on the curb for traffic to pass.

(5) Not jog at night or early morning without wearing reflective articles of clothing.

(6) Not jaywalk or disregard traffic signals, stop signs, and crosswalks.

c. All bicyclists on Fort Gordon will use an approved bicycle helmet. All bicycles operating on the roadways of this installation during the hours of darkness (dusk and dawn) will be equipped with a headlight and reflective markings, front and rear. Markings may be either reflectorized paint or tape not less than 4 inches in length.

d. The use of single or double headphones or earphones while walking, jogging, skating, or bicycling on Fort Gordon's roadways is prohibited.

13-4. Weapons Safety. Commanders will take the following minimum actions to establish and maintain control over firearms and ammunition:

a. Publish SOPs covering the proper storage, issue, handling, and use of firearms. Frequent checks will be made to ensure compliance. Newly assigned personnel will become thoroughly familiar with the established SOPs.

b. Ensure firearm training emphasizes accident prevention. Particular emphasis will be placed on the proper methods for loading, locking, and clearing of firearms.

c. Ensure firearms are not cleared or cleaned in areas where personnel congregate. A separate area will be provided for this purpose.

d. Ensure newly assigned personnel are aware of the requirement to register all personally owned firearms with the Provost Marshal before bringing them on the installation.

e. Additional requirements are contained in AR 190-11.

13-5. Electrical Hazards.

a. Only trained and qualified personnel will work on electrical transmission lines or electrically-powered equipment. Defective electrical wiring, and other electrical hazards should be reported to DPW for correction.

b. Flag poles, radio masts, and similar objects will not be erected or dismantled where the possibility of contact with energized circuits exists.

c. Power cords will not run through doorway, under carpeting, through holes in wall or ceiling or across aisles.

d. Extension cords will be used only for the connection of temporary portable equipment and will not be used in lieu of permanent wiring. Extension cords will not be attached to other extension cords.

e. Operators of military vehicles appropriately equipped must tie down vehicular antennas upon entering garrison area.

13-6. Machine Safety. Rings, other jewelry, loose clothing, and long unbound hair will not be worn when working around moving machinery, during vehicle maintenance or other hazardous industrial operations.

13-7. Tripping hazards. All aisles, passageways, stairs, and other walking surfaces will be free of tripping hazards.

13-8. Severe weather hazard precautions.

a. Each unit and activity will be prepared to deal effectively with hazards associated with inclement weather. Such hazards include slippery walkways due to rain, ice, or snow and hazards associated with high winds and tornados. Each unit and activity will prepare a plan of action to handle these hazards and will ensure all personnel are familiar with the plan.

b. When ice or snow conditions develop after regular duty hours, all personnel will monitor local radio stations for reporting instructions.

13-9. Hazardous Training.

a. Hazardous training is training that exceeds normal military activities. The following is a partial list of those activities. For definitions of risk assessment levels for training refer to Chapter 22.

(1) Water operations (canoeing, stream crossing, rafting) off the installation.

(2) Vehicle convoy operations except routine movements on installation roadways.

(3) Airborne operations on other than approved drop zones.

(4) Petroleum operations at other than authorized POL points.

(5) Exercises involving the use of live fire or explosive ordnance on other than established ranges.

(6) Rapelling in other than approved areas.

(7) Rock climbing.

b. Units planning to start new high risk training exercises on Fort Gordon will submit a detailed scenario or lesson plan to the Installation Range Control Officer before the training. The request will be reviewed by the Range Control Officer and coordinated with the SBSD to ensure the proposed training will be conducted safely IAW current regulations and doctrine. A risk assessment will be performed for all training IAW Chapter 22 of this document and submitted to the SBSD for validation.

13-10. Lockout/Tagout Procedures.

a. The purpose of locking and tagging is to ensure the safety of employees working on power-driven equipment by preventing it from being energized during maintenance. This includes electric, steam, pneumatic, hydraulic, or gas-powered equipment and electrical circuits. Whenever power-driven equipment or an electrical circuit is being worked on, it must be locked out and tagged IAW 29 CFR 1910.147.

b. Requirements.

(1) Leaders/supervisors/commanders will ensure that subordinates lockout and tag the main source of power before any maintenance, inspection, cleaning, or contact with machinery, equipment or systems that have potential to cause injury or death.

(2) The lockout will be by padlocks, blank flanges, padlock with chains, or similar device that physically prevents reactivation of a main power source.

(3) Individuals required to use locks and tags will be issued a personal lock and key. To eliminate the chance of unauthorized lock removal, duplicate keys will not be provided.

(4) The lockout device will be accompanied by a "Danger" tag that has the installer's full name, shop, telephone number, and date of installation.

(5) In any instance where physical lockout of the main power source is not possible, an attendant must be placed at the control device during work efforts.

c. Responsibilities.

(1) Commanders/Directors/Activity Chiefs are responsible for implementing requirements of this lockout/tagout plan.

(2) An SOP will be prepared detailing lockout/tagout procedures and a copy provided to the SBSD for approval.

(3) Leaders and supervisors of civilian and military employees are responsible for training and reviewing lockout/tagout safety rules and procedures with each individual at initial work orientation and at least annually. Each training/review session will be documented on DD Form 1556. Documentation will include individuals signature as confirmation that training/review of lockout/tagout has been conducted and understood. A copy of the completed DD 1556 for each individual will be provided to the SBSD.

(4) Shop supervisors are responsible for providing and maintaining appropriate lockout and tagging devices.

(5) SBSD will monitor compliance with lockout/tagout requirements.

CHAPTER 14
CONFINED SPACE ENTRY PROGRAM

14-1. General.

a. This document and 29CFR 1910.146 provide minimum safety requirements to be followed while entering, exiting, and working in confined spaces.

b. IAW 29 CFR 1910.146, confined space means a space that:

(1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and

(2) Has limited or restricted means of entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and

(3) Is not designed for continuous employee occupancy.

c. Also refer to Chapter 11 on the Respiratory Protection Program and Chapter 13 on Lockout/Tagout Procedures when working in confined spaces.

14-2. Responsibilities.

a. SBSD will:

(1) Establish and administer a comprehensive confined space entry program and appoint a confined space program manager.

(2) The SBSD, in coordination with Preventive Medicine Service, will designate and classify areas on the installation considered confined spaces.

(3) Maintain a current list of confined spaces on the installation.

(4) Ensure that permit issuers are appointed for all directorate/activities who may have employees entering confined spaces.

(5) Provide guidance, upon request, to supervisors/permit issuers in the preparation of SOPs on confined space entry.

(6) Approve SOPs prepared for confined space entry before they are published.

b. Prevention Medicine Service will:

(1) In coordination with the SBSD, designate and classify confined spaces on the installation.

(2) Provide guidance to supervisors/permit issuers in the preparation of SOPs on confined space entry.

(3) Conduct on-site evaluations of confined space entry operations and permits, as required, to ensure compliance with prescribed directives and provide the SBSD with a copy of results.

(4) Assist with confined space entry and respirator training, as needed.

(5) Determine if workers referred by supervisors are physically able to perform their duties.

(6) Perform annual medical surveillance on employees referred by supervisors who are required to enter Class A and B confined spaces.

c. DHR will: Refer personnel being considered for employment who may be required to enter confined spaces to the Occupational Health Clinic for pre-placement physical examinations.

d. Fire Protection and Prevention Division will:

(1) Ensure that the confined space entry program requirements are implemented in their areas of responsibility.

(2) Be the sole source of "Hot Work" permits.

(3) Be on standby when employees are performing "hot work" in confined spaces.

e. Directors/commanders with employees who may be required to enter confined spaces will:

(1) Appoint, in writing, permit issuers and submit appointment orders to the SBSD.

(2) Ensure the number of permit issuers appointed are sufficient to meet operating needs.

(3) Ensure permit issuers are trained.

(4) Provide permit issuers with proper monitoring equipment.

(5) Ensure employees are supplied with required PCE to enter the confined space.

(6) Have a written confined space SOP that has been approved by the SBSD.

f. Supervisors will:

(1) Be familiar with the provisions of this program as they relate to personnel or operations under their control.

(2) Explain to all personnel under their immediate supervision the nature of the hazards with the operations and the precautions necessary to control such hazards.

(3) Ensure appropriate personnel are trained before entering confined space.

(4) Strictly enforce safety and health guidelines for confined space operations.

(5) Promptly report any unsafe acts, conditions, or procedures and, where warranted by such conditions, cease operation until corrective actions are taken.

g. Permit issuers will:

(1) Be appointed in writing with a copy provided to the SBSD.

(2) Be knowledgeable in confined space entry procedures and the proper selection, use, calibration, maintenance, and care of instruments required before performing such duties.

(3) Ensure records and certifications are made part of their personnel folders.

(4) Test confined space with properly calibrated testing equipment before entry.

(5) Approve the confined space entry permits IAW paragraph 14-5 of this document before permitting entry.

(6) Ensure sufficient personnel are present for operation.

(7) Ensure required PCE is available and in good condition.

(8) Ensure personnel and equipment are protected during operation.

(9) Contact the Fire Prevention Division when employees are required to perform hot work in a confined space.

h. Employees will:

(1) Understand and strictly observe safety standards, regulations, and procedures applicable to confined space entry or work.

(2) Use proper PCE for the appropriate confined space classification.

(3) Report any condition, procedure, or equipment considered unsafe to their immediate supervisor immediately.

(4) Warn others believed to be endangered by failure to observe the proper procedures or precautions.

14-3. Entry and Rescue.

a. The confined space Entry Permit at Figure 14-1 is based upon the characteristics of the confined space, oxygen level, flammability and toxicity. If any of the hazards present a situation immediately dangerous to life or health (IDLH), the confined space will be designated Class A. The classification will be determined by the most hazardous condition of entering, working in, and exiting a confined space. A Class B confined space has the potential for causing injury and illness but is not immediately dangerous to life and health. A Class C confined space is one in which the hazard potential would not require any special modification of the work procedure.

b. The Entry Permit at Figure 14-1 delineates the minimum preparation required for each class of confined space entry. For example, the Permit System (Class A, B, and C) means a permit is mandatory for Class A, B, and C confined space entry.

c. If the work practice involved in the confined space has the potential to increase existing hazards or generate additional ones, it will be necessary to evaluate the space to determine if a classification change is warranted.

d. Rescue procedures will be specifically designed for each entry. If a confined space has an A or B classification, there will be a trained attendant assigned to that confined space. There will also be a fully charged, positive pressure, self-contained breathing apparatus (SCBA) on scene. Duties of the attendant are to maintain unobstructed life lines and communications to all workers within the confined space and to summon rescue personnel if necessary. Under no circumstances will the attendant enter the confined space. While awaiting rescue personnel, the attendant will make rescue attempts using the life lines from outside the confined space. Rescue teams entering Class A or B confined spaces will be equipped with all safety equipment required for entry, including an attendant and required life lines.

e. In the event of a Class C confined space rescue, a supplied-air respirator or a self-contained breathing apparatus will be used. A person summoned or one who recognizes the need for rescue will summon assistance and await their arrival outside the confined space. Respirators and life lines will be donned by rescue personnel with necessary equipment for removal of the victim(s).

14-4. Permit System (Class A, B, and C).

a. Entry into a permit required confined space will be by permit only. The permit is an authorization and approval, in writing, that specifies the location and type of work to be done. The permit also certifies that all existing hazards have been evaluated by the permit issuer and necessary protective measures have been taken to ensure the safety of each worker.

b. The permit issuer will be responsible for approving the permit when the following areas and actions have been reviewed and confirmed:

(1) Location and description of the work to be done (Class A, B, and C).

(2) Hazards that may be encountered (Class A, B, and C).

(3) Complete isolation checklist (Class A, B, and C).

(a) Blanking and/or disconnecting.

(b) Electrical lockout.

(c) Mechanical lockout.

(4) Special clothing and equipment (Class A and B).

(a) Personal protective equipment and clothing.

(b) Safety harness and/or lines.

(c) Tools approved for use in accordance with the Hazardous Location Certification (NEC-1978).

(d) Approved electrical equipment.

(5) Atmospheric test reading (Class A, B, and C).

(a) Oxygen level.

(b) Flammability and/or explosive levels.

(c) Toxic substance levels.

(6) Atmospheric monitoring while work is being performed. (Class A on a continuous basis and Class B as determined by the permit issuer.)

(7) Personnel training and complete understanding of the hazards (Class A, B, and C).

(8) Attendant(s) as named on the permit (Class A, B, and C).

(9) Emergency procedures and location of first aid equipment (Class A, B, and C).

(10) Confined space classification A, B, and C.

c. Classes A and B permits will carry an expiration time and date valid for one shift only and will be renewed before each shift. Certain Class C permits can be reviewed annually as long as there is no change during the atmosphere testing.

d. Class A or B confined space permits will be posted in a conspicuous place, close to the entrance of the work space, with a copy on file with the activity.

e. Training requirements of personnel entering or working in confined spaces will be suitable for the nature of the hazard and the work to be performed.

14-5. Medical Examinations (Class A and B).

a. Workers who enter a Class A or B confined space will have pre-placement and termination physical examinations. The supervisor will schedule employees for physical examination before allowing entry into confined spaces.

b. The employees will bring the following to the examination with them:

(1) Description of the type of confined space the employee may be required to enter,

(2) A listing of substances the employee may encounter,

(3) and the protective devices or equipment the employee will be required to use.

c. The physical examination will include:

(1) A demonstration of the worker's ability to use their personal protective equipment.

(2) A demonstration of the worker's ability to see and hear warnings, such as flashing lights, buzzers or sirens.

d. Following completion of the examinations, the physician will approve or disapprove the employee for confined space work.

e. Annual medical examinations are required for employees to work in Class A or B confined spaces and will be scheduled by the supervisor.

f. First Aid Provisions.

(1) For Class A and B entry there will always be someone readily available in the area trained in cardiopulmonary resuscitation (CPR) and basic first aid procedures.

(2) An adequate supply of first aid equipment will be within easy access of the confined space entrance and employees will know its location. Employees will know how to obtain emergency assistance and medical attention.

g. Records of exposure to known health hazards will be included in employee's medical record. These exposure records will be made available to the designated medical representatives of the Secretary of Labor, the supervisor and the employee or former employee.

14-6. Training. (Class A, B, and C).

a. The supervisor and permit issuer will be responsible for ensuring personnel are trained and for the safety of the entire operation. Records of training will be maintained. Personnel working in the vicinity of confined spaces will be made aware of the hazards. Personnel required to work in a confined space or in support of those working in a confined space will have additional training as follows:

(1) Emergency entry and exit procedures (Class A, B, and C).

(2) Use of applicable respirators (Class A, B, and C).

(3) First aid (Class A and B).

(4) Lockout procedures (Class A, B, and C).

(5) Safety equipment use (Class A, B, and C).

(6) Initial and annual rescue and training drills designed to maintain proficiency or at lesser intervals as determined necessary. (Class A, B, and C).

(7) Permit system (Class A, B, and C).

14-7. Testing and Monitoring. (Class A, B, and C).

a. Entry into a confined space is prohibited until the attendant has completed initial testing of the atmosphere from the outside. Appropriate tests will be made to ensure the atmosphere is safe. Tests will include those for oxygen content, flammability, and toxic materials. Additional tests will be selected and performed to the satisfaction of the attendant person. Monitoring of Class A confined space will be done continuously. Class B and C will be monitored, as determined, by the attendant.

b. Entry into a confined space for any type of hot work will be prohibited when tests indicate the concentration of flammable gases in the atmosphere is greater than 10 percent of the lower explosive limit (LEL). It is necessary to determine the oxygen level (by appropriate testing) before measuring the range of flammability and to make necessary corrections in the flammability measurement. Monitoring of the atmosphere will be performed in accordance with the permit. Equipment for continuous monitoring of gases and vapors will be explosion proof and equipped with an audible alarm or danger signaling device that will alert employees when a hazardous condition develops. Instruments used for testing the atmosphere in a confined space will be selected for their functional ability to measure hazardous concentrations. Instruments will be calibrated in accordance with the manufacture's guidelines. Each calibration will be recorded, filed, and available for inspection for 1 year after the last calibration date.

c. In any confined space classified as a Class II or Class III hazardous location according to Article 500 of the National Electrical Code, a fire watch will be established as part of the entry procedure. In such areas surface dust and fibers will be removed and no hot work will be initiated until the airborne particulate level is below 10 percent of the LEL for the material. When combustible dusts or ignitable fibers/flyings (airborne fine particulate matter) are present, all equipment and ventilation systems used in the confined space will comply with Articles 502 and 503 of the national Electrical Code.

d. The percentage of oxygen for entry into a confined space will be no less than 19 percent nor greater than 23 percent. If tests indicate the oxygen level to be greater than 23 percent hot work is prohibited until ventilating techniques have reduced the oxygen level to approximately 21 percent. If the percentage of oxygen falls below 19, approved respiratory protection equipment will be used.

e. When the contaminants in the atmosphere cannot be kept within permissible exposure levels as set down 29 CFR 1910 Subpart Z, the employee will wear an approved respirator.

14-8. Labeling and Posting (Class A, B, and C).

a. In order to prevent inadvertent or unauthorized entry into a confined space, such areas will be posted and guarded as appropriate.

b. Entrances to confined spaces of permanent structures will be posted as necessary. Signs will include, but not necessarily be limited to the following information:

DANGER
CONFINED SPACE
ENTRY BY PERMIT
ONLY

c. When a specific work practice is performed or specific safety equipment is necessary, the following statement will be added, in large letters, to the warning sign:

RESPIRATOR REQUIRED
FOR ENTRY

LIFELINE REQUIRED
FOR ENTRY

HOT WORK PERMITTED
OR
NO HOT WORK ALLOWED

d. The permit will be posted conspicuously within the immediate area of the confined space.

e. To prevent unauthorized or inadvertent entries into confined spaces where work is in progress, such areas will be posted, as warranted, until the operations have been completed.

14-9. Personal Protective Equipment and Clothing (Class A, B and C).

a. The entry permit will include a list of necessary protective equipment to be used in the confined space as determined by the permit issuer. The supervisor will be responsible for the proper use of the safety equipment and the inspection and maintenance procedures performed on the safety equipment.

b. Items normally used to protect against traumatic injury include: safety glasses, hardhats, safety footwear, and protective coveralls and respiratory protection as directed by Chapter 11.

(1) Eye and Face Protection. For persons who wear corrective spectacles, prescription ground safety glasses will be provided. Plano-goggles will be provided for others as necessary. If eye-irritating chemicals, vapors, or dusts are present, chemical resistant goggles will be required. If both the face and eyes are exposed to a hazard as during scraping scale or cutting rivets, a full coverage face shield with goggles will be used. During welding operations special goggles or shields will be used in accordance with 29 CFR 1910.252.

(2) Head Protection. Hard hats will meet the requirements cited in 29 CFR 1910.135.

(3) Foot Protection. All foot protection will meet or exceed the requirement cited in 29 CFR 1910.136 and will provide, in addition to protection from falling objects, protection from any other hazard identified by the permit issuer.

(4) Body Protection. Personnel entering a confined space will wear work clothing as specified by the permit issuer.

(5) Hearing Protection. When engineering technology is insufficient to control the noise level and the ambient exposure limit exceeds those allowed in TB MED 501, appropriate hearing protection will be worn. Emergency alarms will be distinguishable when hearing protection is worn. Sound level meters used to measure noise levels will be certified by NIOSH in accordance with DoD standards. Where the potential for explosion exists, sound level meters will be explosion-proof.

(6) Respiratory Protection. Only respiratory protective equipment which has been NIOSH approved will be used for confined space entry. A careful evaluation of all exposures or potential exposures must be made before proper respiratory protective devices can be determined. Such evaluations will include as a minimum:

(a) Types of contaminants present, likely to be present or generated (dust, mists, fumes, vapors, etc.)

(b) Concentration of contaminants present.

(c) Appropriate permissible exposure limits of the contaminants (threshold limit values, ceiling values, etc.).

(d) IDLH values of contaminants.

(e) Oxygen levels present.

(7) Respiratory protective devices tested and approved by NIOSH in accordance with the provisions of 30 CFR Part II, include the following:

---Self-contained breathing apparatus. May be closed circuit, open positive pressure types. These units are tested and approved for entry into or escape from atmospheres which are IDLH. Type "C" or "CE" supplied air respirators equipped with a self-contained emergency air supply are also tested and approved for emergency entry into atmospheres which are IDLH.

---Supplied air respirators, including hose masks with and without blowers, and airline respirators with respirable air supplies from a compressor or cylinder. These devices are tested and approved for atmospheres which are IDLH.

---Cartridge of filter-type respirators, which remove contaminants such as dusts, mists, fumes, vapors, etc., from air drawn into the respirator by the user, are tested and approved for atmospheres which are not IDLH and which contain adequate oxygen to support life. These devices are capable of providing protection only against specific contaminants in limited concentrations. Therefore, caution must be exercised to ensure the correct respirator and cartridge is selected for use and that concentrations of contaminants do not exceed the approved capacity of the device.

---The activity respiratory protection equipment shall comply with 29 CFR 1910.134 and Chapter 11 of this document.

(8) Hand Protection. Hand protection can range from canvas to metal mesh gloves, depending on the material handled. Gloves made of impervious rubber or similar material are to be worn to protect against toxic or irritating materials. Heat protective gloves are required when employees handle objects with temperatures greater than 60 C (140 F). Where a current flow through the body of more than 5 milliamperes may result from contract with energized electrical equipment, employees will wear insulating gloves that have been visual inspected before each use. Above 5,000 volts, rubber gloves in accordance with 29 CFR 1910.137 will be worn.

c. Additional safety equipment necessary to protect the worker in the environment of confined space:

(1) A safety belt with "D" rings for attaching a lifeline will be worn.

(2) The combination of a body harness and/or safety belt with lifeline will be used when:

(a) an employee is required to enter the confined space to complete the gas analysis;

(b) when an employee is working in an area where entry for purpose of rescue would be contraindicated (special limitations or fire hazard);

(c) when any failure of ventilation would allow the build-up of toxic or explosive gases within the time necessary to evacuate the area;

(d) when atmosphere is immediately dangerous to life and health.

(3) Safety belts may be used as the primary means of suspension for the life line only when rescue may be made by keeping the disabled body in a position that will allow easy passage through exit openings.

(4) If the exit opening is less than 18 inches (45 cm) in diameter, a wrist-type harness will be used.

(5) When it is determined by the permit issuer that none of the special hazards associated with confined spaces pose an immediate threat to life in Class C entry, life lines will be readily available but not required during entry and work procedures.

d. Other protective measures will include:

(1) safety nets used to protect employees working 10 feet (3 m) above ground or grade level when other protective devices are impractical;

(2) Life jackets worn if workers are exposed to falls into liquid over 4 feet (1.2 m) in depth;

(3) Insulated floor mats when hot work requires use of electrical energy.

(4) A barricade will be erected if inadvertent entry poses a problem. The barricade will have a mechanism to prevent closure of the escapeway, signs warning of the danger present, a physical barrier (fence) to keep the area clear, and an adequate platform (3 feet x 3 feet as a

minimum) for entry or exit. Such added features as a tripod with block and tackle for safety lines and communication equipment should be considered when the entry plan is formulated. The attendant will be responsible for maintenance of the barricade system.

14-10. Work Practices (Class A, B, and C). Before entering a confined space, employees will review the specific guidelines appropriate for safe entry and emergency exit. These guidelines or standards will be compiled by the permit issuer and be definitive on all the possible hazards. Areas covered by such guidelines will follow this recommended standard.

a. Purging and Ventilating (Class A and B).

(1) Environmental control within a confined space may be accomplished by purging and ventilating. The method used will be determined by the potential hazards that arise due to the product stored or produced, suspected contaminants, work to be performed, and the design of the confined space. When ventilating and/or purging operations are to be performed, the blower controls will be at a safe distance from the confined space. In a Class A entry, an audible warning device will be installed to signal when there is a ventilation failure. When a ventilation system is operational, air flow measurements will be made before each workshift to ensure that a safe environmental level is maintained. Initial testing of the atmosphere will be performed from outside the confined space before ventilation begins to determine necessary precautions in purging and ventilating. Testing of more remote regions within the confined space may be performed once the immediate area within the confined space has been made safe. Exhaust systems will be designed to protect workers in the surrounding area from contaminated air. If flammable concentrations are present, all electrical equipment will comply with the requirements of hazardous locations and bonding contained in Article 250, NEC. Where continuous ventilation is not part of the operating procedure, the atmosphere will be tested until continuous acceptable levels of oxygen and contaminants are maintained for three tests at 5 minute intervals. Care will be taken to prevent recirculation of contaminated air and interaction of airborne contaminants.

(2) Continuous general ventilation will be maintained where toxic atmospheres are produced as part of a work procedure, such as welding or painting, or where a toxic atmosphere may develop due to the nature of the confined space; i.e., absorption from walls or evaporation of residual chemicals. General ventilation is an effective procedure for distributing contaminants from a local generation point throughout the work space to obtain maximum dilution However, special precautions will be taken if the ventilation system partially blocks the exit opening. These precautions include a method for providing respirable air to each worker for the time necessary for exit and a method of maintaining communications.

(3) Local exhaust ventilation will be provided when general ventilation is not effective due to restrictions in the confined space or when high concentrations of contaminants occur in the breathing zone of the worker. Local high concentrations of contaminants occur in the breathing zone of the worker. Local high concentrations of contaminants may occur during activities such as welding, painting, and chemical cleaning. The worker will not be exposed to concentrations of contaminants in excess of those specified in 29 CFR 1910 Sub Part Z. Therefore, respiratory protection may be needed in addition to engineering controls. The use of respiratory protection will be determined by the permit issuer. However, when fumes may be generated that contain highly toxic or other airborne metal contaminants, provisions of 29 CFR 1910.252 will be observed. When freely moving exhaust hoods are used to provide control of fumes generated during welding, such hoods will maintain a velocity of 100 cubic feet per minute in the zone of the welding. The effective force of freely moving exhaust hoods is decreased by approximately 90 percent at a distance of one duct diameter from the plane of the exhaust opening. Therefore, to obtain maximum effectiveness, the welder will reposition the exhaust hood as he changes welding locations to keep the hood in close proximity to the fume source.

(4) Special precautions will be taken when outgassing or vaporization of toxic and/or flammable substances are likely. If the vapor-generating rate can be determined, the exhaust rate required can be calculated to dilute the atmosphere below the PEL and/or 10 percent of the LEL, whichever is lower. This will be the lowest acceptable ventilation rate. If the area of concern is relatively small, diffusion of the contaminants may be controlled by enclosure with a relatively low volume exhaust for control,or by exhaust hoods located as close as possible to the area of vaporization or outgassing. If the area to be ventilated is too extensive to be controlled by local exhaust, general ventilation procedures will be used to control the contaminant level. When the problem of outgassing is due to the application of protective coatings or paint, ventilation will be continued until the build-up of a flammable and/or toxic atmosphere is no longer possible.

b. Isolation/Lockout/Tagging (Class A and B).

(1) The isolation procedures will be specific for each type of confined space. Safety equipment required during this procedure will be designated by the permit issuer and be dependent upon the potential hazards involved. A Class A or B confined space will be completely isolated from all other systems. Where complete isolation is not possible, such as sewers or utility tunnels, specific written safety procedures that are approved and enforced by the permit issuer will be used. Blanks used to seal off lines will be:

(a) capable of withstanding the maximum working pressure or load of the line (with a minimum safety factor of 4).

(b) be provided with a gasket on the pressure side to ensure a leakproof seal.

(c) be made of chemically non-reactive material. Shutoff valves serving the confined space will be locked in the closed position and tagged for identification. In addition to blanking, pumps and compressors serving lines entering the confined space will be locked out to prevent accidental activation.

(2) All blanks used for that specific confined space will be recorded on the entry permit.

(3) If a drain line is located within the confined space, provision will be made when necessary to tag it and leave it open. This will also be recorded on the entry permit.

(4) Additional procedures necessary when the confined space is of double wall type construction; e.g., water jacketed or similar type will be determined by the permit issuer and noted on the entry permit.

(5) Electrical isolation of the confined space to prevent accidental activation of moving parts that would be hazardous to the worker is achieved by locking circuit breakers and/or disconnects in the open (off) position with a key-type padlock. The only key is to remain with the person working inside the confined space. If more than one person is inside the confined space, each person will place his own lock on the circuit breaker. In addition to the lockout system, there must be an accompanying tag that identifies the operation and prohibits use.

(6) Mechanical isolation of moving parts can be achieved by disconnecting linkages or removing drive belts or chains. Equipment with moving mechanical parts will also be blocked in such a manner that there can be no accidental movement.

c. Cleaning (Class A, B, and C).

(1) Procedures and processes used to clean the inside of a confined space will be approved by the SBSD, Fire Department, and Industrial Hygienist. The method to be prescribed will be dependent upon the product in the space. If the confined space contains a flammable atmosphere above the upper flammable limit, it will be purged with an inert gas to remove the flammable substance before ventilating with air. Initial cleaning will be done from outside the confined space if at all possible.

(2) Special procedures should be adopted to handle the hazards created by the cleaning process itself. If the tank is to be steamed:

(a) it will be allowed to cool prior to entry;

(b) ventilation will be maintained during neutralization procedures to prevent build-up of toxic materials;

(c) steaming will not be used as a cleaning method when the product stored was a liquid with an autoignition temperature 120 percent or less of the steam temperature; and

(d) the pipe or nozzle of the team hose will be bonded to the tank to decrease the generation of static electricity that could accumulate in tanks during steaming procedures. These and other hazards and controls will be evaluated by the SBSD and Fire Department.

d. Equipment and Tools (Class A, B, and C). Equipment and tools to be used in a confined space will be carefully inspected and will meet the following requirements.

(1) Hand tools will be kept clean and in good repair.

(2) Portable electric tools, equipment, and lighting will be approved in accordance with 29 CFR Part 1910 Sub Part Z and be equipped with a ground fault circuit interrupter (GFCI) that meets the requirements of 29 CFR 1910.309. All grounds and GFCIs will be checked before electrical equipment is used.

(3) All electrical cords, tools, and equipment will be of heavy duty type with heavy duty insulation and inspected for defects before use.

(4) Air-driven power tools will be used when flammable liquids or atmospheres are present.

(5) Lighting used in class A and B confined spaces will be explosion-proof and where necessary, be equipped with guards. Only equipment listed by Underwriters Laboratories for use in Division 1, atmospheres of the appropriate class and group, or approved by U.S. Bureau of Mines or Mining Enforcement and Safety Administration or Mine Safety and Health Administration, or the U.S. Coast Guard will be used. Lighting will not be hung by electric cords unless specifically designed for that purpose. The illumination of the work area will be sufficient to provide for safe work conditions as referenced in the ANSI standard A11-1-1965 or the revision, 1979. Under no circumstances will matches or open flames be used in a confined space for illumination.

(6) Cylinders of compressed gases will never be taken into a confined space and will be turned off at the cylinder valve when not in use. Exempt from this rule are cylinders that are part of self-contained breathing apparatus or resuscitation equipment.

(7) Ladders will be adequately secured or of a permanent type which provides the same degree of safety as cited in 29 CFR 1910 Sub Part D.

(8) Scaffolding and staging will be properly designed to carry maximum expected load, be equipped with traction type planking, and meet the requirements of 29 CFR 1910.28.

(9) Electrical lines, junctions, and appurtenances will be in accordance with National Electric Code and 29 CFR 1910.309.

(10) Only hose lines and components designed specifically for the compressed gas and working pressure will be used and such systems will have a pressure relief valve outside the confined space.

(11) All tools and equipment used in a flammable atmosphere will be approved as explosion proof or intrinsically safe for the atmosphere involved by a recognized testing laboratory (such as the U.S. Bureau of Mines, MES, or MSHA for methane and by the Underwriters Laboratories or Factory Mutual) for all cases.

e. Recordkeeping (Class A and B).

(1) The permit issuer will maintain a written record of training including safety drills, inspections, tests, and maintenance and send a copy to the SBSD. The records will be retained 1 year after the last date of training, inspection, test, or maintenance.

(2) Where atmospheric testing indicates the presence of a toxic substance, records will be maintained in accordance with the existing Federal regulation(s). These records will include the dates and times of measurements, duties and location of the employees within the confined space, sampling and analytical methods used, number, duration, and results of the samples taken, PEL concentrations estimated from these samples, type of personal protective equipment used, if any, and employees' names. These records will be made available to the designated representatives of the Secretary of Labor, and the employee or former employee.

CHAPTER 15
BRANCH SAFETY

15-1. General.

Branch safety is the Commander USASC&FG's program to identify issues and correct problems that affect the Signal Corps soldier's safety. It includes integrating safety into equipment, training and doctrine.

15-2. Responsibilities.

a. The SBSD will:

(1) Develop safety related critical test issues.

(2) Analyze accident data and identify accident trends to develop safety lessons learned.

(3) Develop safety releases for pre-test training for local tests, experiments, appraisals and demonstrations.

(5) Develop safety release recommendations for USASC&FG sponsored user tests.

b. The Director of Each Training Department will:

(1) Risk manage all lesson plans and assign a residual risk of Extremely High, High, Medium, or Low (See Chapter 22). The risk level will appear in the Administrative Data Sheet.

(2) Forward a list of low risk lesson plans to the SBSD.

(3) Staff medium risk lesson plans with the SBSD for approval.

(4) Staff high risk lesson plans through the SBSD to Commander USASC&FG for approval.

(5) Staff extremely high risk lesson plans through the SBSD and Commander USASC&FG to the Commander TRADOC for approval.

c. The Office of the Deputy Commander/Assistant Commandant will:

(1) Coordinate safety lessons learned with the SBSD.

(2) Monitor training for safety content and coordinate safety problems with the SBSD.

d. The Directorate of Combat Developments will:

(1) Coordinate critical operational issues and criteria for tests of communications electronics (CE) or information systems or equipment(s) with the SBSD.

(2) Inform the SBSD of scheduled Test Integration Working Groups for possible input.

(3) Coordinate Concept Evaluation Programs that involve SC troops with the SBSD.

e. Commanders, directors, and other supervisors will:

(1) Risk manage all FTXs (See Chapter 22).

(2) Staff medium risk FTXs with the next higher level of command.

(3) Staff high risk FTXs with the Commander USASC&FG for approval.

(4) Staff extremely high risk FTXs with the Commander USASC&FG, and Commander TRADOC for approval.

(5) Ensure that their personnel understand the risks associated with the FTX.

Chapter 16
USASC&FG UNIT SAFETY PROGRAM
STANDING OPERATING PROCEDURE (SOP)

16-1. General.

Each USASC&FG unit will have a written SOP for safety. Commanders at every level will establish and maintain a continuing, comprehensive and aggressive accident prevention program throughout their units. Unit SOPs need not be lengthy, but must reflect the commander's development of an aggressive accident prevention program. To assist commanders in their SOP development, a sample follows.

16-2. Sample Safety SOP.

a. PURPOSE. To ensure a continuing, aggressive preventive safety program throughout the unit.

b. REFERENCES. AR 40-10 AR 385-10, AR 385-40, AR 385-55, DA PAM 385-2.

c. SCOPE. This SOP outlines the organization of the Unit safety program and the responsibilities of personnel implementing the safety program.

d. OBJECTIVE. To improve the readiness and effectiveness of the unit by minimizing personnel injury and equipment losses.

e. RESPONSIBILITIES. The commanding officer is responsible for assuring the accident prevention program meets the requirements of current regulations. The following personnel are responsible as indicated:

(1) Collateral Duty Safety Officer/NCO will:

(a) Attend the Special Safety Representative course taught by the SBSD and be familiar with the contents of this Single Source Safety Program Document.

(b) Ensure the Material Safety Data Sheets are on hand for all hazardous chemicals used in the workplace.

(c) Ensure all personnel are briefed on the hazardous materials their job requires them to use IAW FG 385-1.

(d) Provide staff management of the unit safety program.

(e) Establish and maintain a unit safety bulletin board containing current safety literature and information.

(f) Make regular inspections of the unit , to include all facilities and areas OPCON to the unit, and initiate action to correct the discrepancies detected. Inspections will be documented and a copy forwarded to the SBSD.

(g) Investigate or coordinate the investigation of accidents occurring within the unit. Prepare accident reports when appropriate. Contact the SBSD (or host Safety Office) for technical assistance, when necessary.

(h) Establish and maintain an accident case file for all accidents during the current and previous calendar year.

(i) Conduct periodic safety briefings for personnel. Present initial safety briefing to newly assigned personnel.

(j) Prepare a safety briefing guide for the commander's use before holiday periods or weekends.

(k) Brief the commander regularly on the status of the unit accident prevention effort.

(2) The unit commander will:

(a) Assure newly assigned personnel report to the unit Safety Officer/NCO for safety orientation.

(b) Establish in writing a safety SOP for specific operations. Enforce the procedures established.

(c) Integrate current safety requirements into all activities and plans.

(d) Assure training of personnel is adequate for safe operation for equipment to avoid injury or equipment loss.

(e) Assure necessary protective equipment and clothing is available as required for daily operations.

(f) Report to the SBSD for a safety briefing within 30 calendar days of assignment.

(g) Control the use of hazardous chemicals to ensure safe use and disposal.

(h) Ensure all unit members are familiar with the hazards of their workplace, such as the hazardous materials involved.

(i) Review accident reports.

(3) The unit motor officer/NCO will:

(a) Ensure unit drivers are trained before licensing for operation of military vehicles.

(b) Conduct safety briefings to unit drivers.

(c) Establish safe operating procedures for motor pool operations and provide enforcement measures.

(d) The motor officer will ensure that personnel operating military vehicles have completed the Army Driver Improvement (ADIP) course.

(e) In the absence of a motor officer/NCO the unit commander will appoint someone to perform the above duties.

f. ACCIDENT REPORTING. All accidents will be reported to the supervisor. Pending the arrival of the Collateral Duty Safety Officer/NCO, the supervisor of the injured person will begin the investigation to determine why the accident happened. The supervisor will complete the DA Form 285, when required. The Safety Officer will check for completion and accuracy before forwarding to the Commander.

g. UNIT SAFETY COMMITTEE. The unit safety committee will consist of all members of the unit staff, to include the safety officer and will be operated in conjunction with regularly scheduled staff meetings. Problems concerning safety will be discussed and resolved during these meetings. The safety Officer will provide documentation of actions as needed.

h. SAFETY AWARDS. Personnel who actively support and contribute to the unit safety program will receive special recognition. Leaders will identify supervisors, drivers, and other individuals who are deserving and recommend them for recognition and award as appropriate. An awards committee comprised of the Collateral Duty Safety Officer, XO and SGM will establish criteria and type of awards to recognize individuals or subunits/divisions/branches.

16-3. As appropriate the SOP will also address the following areas/programs:

a. Confined Space Entry
b. Respiratory Protection
c. Hearing Conservation
d. Lockout/tagout Procedures
e. Risk Management
f. Protective Clothing and Equipment Use
g. Convoy Procedures
h. Range Safety

CHAPTER 17
RADIATION PROTECTION

17-1. Purpose.

To keep exposure to ionizing and non-ionizing radiation within safety standards, and As Low As Reasonably Achievable.

17-2. Scope.

This chapter applies to all USASC&FG units and all Fort Gordon tenants. It applies to Reserve, National Guard, military, and civilians that train on Fort Gordon. It applies to contractor operations on Fort Gordon. It does not apply to radiopharmaceuticals or medical equipment used by DDEAMC.

17-3. Responsibilities.

a. The Radiation Protection Officer (RPO) will:

(1). Form and chair the Radiation Protection Committee. All issues and a quarterly exposure listing of all personnel badged by the FGRPO will be brought to the Fort Gordon Safety and Occupational Health Council on a quarterly basis.

(2). Maintain an inventory of ionizing radiation sources on Fort Gordon.

(3). Maintain an inventory of RF and Microwave transmitters that have an output power of seven watts or more.

(4). Maintain an inventory of Class III, IV and military exempt laser devices on Fort Gordon.

(5) Ensure compliance with mandated statutes, standards, policies, and procedures with regards to radiation protection.

(6) Ensure all Local Radiation Protections Officers (LRPOs) receive initial and annual refresher training of sufficient depth to ensure compliance with existing standards and the proviion of a safe work environment.

b. USASC&FG Commanders and Directors will:

(1). Provide the RPO a list of the ionizing radiation sources in their control. The list will include name of item, isotope, activity, use, and normal location.

(2). Provide the RPO a list of RF and Microwave transmitters with an output power of seven watts or more. The list will include name of item, output and frequencies normally used on the center and normal location. Note: Classified systems are not exempt from this inventory.

(3). Provide the RPO a list of Class III, IV and military exempt laser devices in their control. The list will include name of item, class, wavelength, use, and normal location.

(4). Update the above lists twice each year in March and September. Negative replies are requried

c. USASC&FG tenant organizations will:

(1). Provide the RPO a list of the ionizing radiation sources in their control. The list will include name of item, isotope, activity, use, and normal location. DDEAMC will provide a listing of the appropriate licenses authorized for use at the Center and make available the current inventory of radioisotopes in use/stored/handled as well as projected transportation of same to the Center.

(2). Provide the RPO a list of RF and Microwave transmitters with an output power of seven watts or more. The list will include name of item, output and frequencies normally used on the center and normal location. Note: Classified systems are not exempt from this inventory.

(3). Provide the RPO a list of Class III, IV and military exempt laser devices in their control. The list will include name of item, class, wavelength, use, and normal location.

(4). Update the above lists twice each year in March and September. Negative replies are requried.

d. Reserve and National Guard units that train on Fort Gordon will:

(1). Provide the RPO a list of the ionizing radiation sources that they might bring onto Fort Gordon during training. The list will include name of item, isotope, activity, use, and normal location.

(2). Provide the RPO a list of RF and Microwave transmitters with an output power of seven watts or more that they might bring onto Fort Gordon during training. The list will

include name of item, output and frequencies normally used on the center and normal location. Note: Classified systems are not exempt from this inventory.

(3). Provide the RPO a list of Class III, IV and military exempt laser devices that they might bring onto Fort Gordon during training. The list will include name of item, class, wavelength, use, and normal location.

(4). Update the above lists twice each year in March and September. Negative replies are requried.

e. The Directorate of Public Works/Corps of Engineers will:

(1). Provide the RPO a list of the ionizing radiation sources contractors will bring onto Fort Gordon The list will include the owner, name of the item, isotope, activity, use, and normal location.

(2). Provide the RPO a list of RF and Microwave transmitters with an output power of seven watts or more contractors will bring onto Fort Gordon. The list will include name of item, output and frequencies normally used on the center and normal location. Note: Classified systems are not exempt from this inventory.

(3). Provide the RPO a list of Class III, IV and military exempt laser devices contractors will bring onto Fort Gordon The list will include the owner, name of item, class, wavelength, use, and normal location.

(4). Update the above lists twice each year in March and September. Negative replies are requried.

f. Civilian organizations and other military units will:

(1). Provide the RPO a list of the ionizing radiation sources they plan to bring onto Fort Gordon The list will include the owner, name of the item, isotope, activity, use, normal location, and dates it will be on Fort Gordon.

(2). Provide the RPO a list of RF and Microwave transmitters with an output power of seven watts or more they will bring onto Fort Gordon. The list will include name of item, output and frequencies normally used on the center and normal location. Note: Classified systems are not exempt from this inventory.

(3). Provide the RPO a list of Class III, IV and military exempt laser devices they will bring onto Fort Gordon The list will include the owner, name of item, class, wavelength, use, normal location, and dates it will be on Fort Gordon.

CHAPTER 18
FIELD TRAINING EXERCISES AND TACTICAL OPERATIONS

18-1. Responsibilities.

a. USASC&FG commanders and units using Fort Gordon facilities will:

(1) Plan field training exercise and tactical operations, ensuring that risk assessment procedures outlined in Chapter 22 of this document are followed.

(2) Ensure that required safety precautions are implemented during all phases of the exercise.

(3) Provide operation plans to the designated safety officer for review during the planning stages before deployment.

b. Unit Safety Officers will:

(1) Assure that precautions in this document are included in operation plans submitted for review by subordinate units.

(2) Present a safety briefing to all participating personnel before deployment.

(3) Prepare reports of accident experience, to include DA Form 285 Accident Reports and after-action reports.

(4) Review accidents that occurred during exercises and develop countermeasures to prevent future occurrences.

(5) Conduct safety surveys and present daily briefings to the command group regarding deficiencies noted and recommended corrective actions.

18-2. Pre-exercise actions/risk management.

(a) Drivers will receive appropriate training in proper off-road driving and convoy procedures.

(b) A reconnaissance will be made of bivouac locations and routes of marches to ensure road hazards are identified and controlled, and that the bivouac area is free of duds, old barbed wire and other hazards.

(c) Pre-exercise maintenance and safety surveys will be made of equipment and vehicles to be used.

18-3. Bivouac areas.

a. Personnel will not erect tents or sleep in the open, near roads, trails or other areas where vehicles might travel. Sleeping spots should be chosen near a large tree or boulder if possible unless there is danger of lightning strikes. Personnel will not sleep under vehicles or trailers. Guards will be posted to protect sleeping areas as necessary.

b. Space heaters will operated IAW TM 10-4500-200-13. Fuel for tent space heaters will be stored outside tents. Fire extinguishers will be readily available for use in tents using space heaters. Fuel lines to heaters will be buried when inside tents and when run across other walkways. Fuels will not be mixed, i.e., diesel will not be mixed with mogas. Where rubber matting or wooden floors are used inside a tent, a sandbox will be placed under the stove. The stove pipe will extend above the highest part of the tent and the flaps around the pipe will be secured to prevent a fire.

c. Areas surrounding the space heaters and stoves will be cleared of combustibles at any point closer than four feet on a horizontal plane from the floor to the ceiling of the tent or building.

d. Adequate ventilation will be provided for all types of fuel-powered equipment to prevent accumulation of carbon monoxide.

e. Gasoline will not be stored inside buildings or tents, nor will it be used as a cleaning agent or solvent.

f. Operation of kitchen equipment, space heaters, generator equipment, lanterns, and related equipment will be restricted to trained personnel. The area around the equipment will be cleared of flammable and combustible materials to prevent fires.

g. A bivouac area fire patrol will be established to ensure that all necessary precautions are taken to prevent accidental fire or explosion. Each bivouac area will establish fire points and organize fire brigades.

h. Generators, refueling vehicles, and electrical equipment will be properly bonded and grounded, IAW the appropriate manuals.

i. Vehicles and trailers will be parked to prevent their rolling into the bivouac area and the wheels chocked.

j. Before starting a vehicle, the driver must walk around the vehicle to ensure no one is in danger from movement of the vehicle.

k. Ground guides will be used for all vehicle movement in bivouac areas.

l. Inflating tires with split rims will be IAW chapter 13 of this document.

m. Communication wire will not be strung over power lines. Commo wire will be run on the ground to prevent injury to soldiers riding in open vehicles and low flying helicopters. All wire will be removed from the range areas upon completion of the exercise.

n. Vertical antennas will be located so as to maintain a distance of at least twice the antenna height between power lines and antenna to preclude contact during assembly and disassembly. All personnel must wear safety goggles, gloves and a helmet before erecting an antenna mast.

o. Weapons, ammunition, pyrotechnic simulators, and explosives will be strictly controlled. Soldiers will be cautioned never to remove or ignite photo flash powder contained in simulators due to the potential for severe powder burns.

18-4. Army motor vehicle operations.

a. Movement of military vehicles under blackout conditions is prohibited on roads open to the public unless prior arrangements have been made to close the roads to public traffic.

b. Drivers will be licensed for the vehicle they are operating.

c. Only highly qualified drivers with good driving records will be used to transport troops.

d. Drivers of vehicles with radios will be cautioned concerning dangers of operating near power lines. Antennas will be tied down when the vehicle is in motion. Antenna caps will be firmly in place. Tape will be used if necessary to secure the cap in place.

e. When crossing hazardous terrain or obstacles where danger of overturning is possible, wheeled vehicle passengers will dismount.

f. Ground guides will be used in bivouac areas. They will walk 2 meters to the left of the vehicle when space permits and 10 meters to the front and rear of the vehicle.

g. Vehicle drivers will maintain a minimum interval of six meters between vehicles at the halt. For administrative parking, e.g. in a holding area, vehicles will park side by side or in a herringbone or staggered formation; not bumper to bumper.

h. Before operation, vehicles will be properly dispatched and Preventive Maintenance, Checks and Services (PMCS) conducted.

i. All personnel will be cautioned never to position themselves between two vehicles or a vehicle and a fixed object.

j. Vehicles, including trailers, will not be overloaded, particularly when transporting personnel.

k. Personnel will be instructed in the proper method of coupling and uncoupling trailers.

l. Drivers will be briefed on actions to be taken in case of breakdown or loss of contact with convoy.

m. Passengers will be briefed on hazards such as standing up, riding on loads, and failure to wear seat belts. Riding on loads under any circumstances is prohibited. The wearing of jewelry is prohibited when riding in 2 1/2 or 5 ton trucks.

n. Towing of any vehicle will be accomplished IAW the vehicle's technical manual and FM 1-22, Vehicle Recovery Operations.

o. At unguarded railroad crossings, vehicles in field training exercises will come to a complete stop and check both directions before crossing. If a vehicle stalls on the tracks, all personnel will immediately evacuate the vehicle.

p. Vehicles will not use railroad tracks as roadways, and personnel will not travel along tracks.

q. Personnel, other than the driver and vehicle commander, will not be transported in the last vehicle of a convoy. A 2 1/2 ton truck or larger will be the last vehicle in a convoy, if a convoy member.

r. Personnel will not sleep in, under, or near vehicles.

s. The maximum number of passengers authorized, load capacity, and the maximum speed limit will be stenciled on the dashboard of the vehicle.

18-5. Tracked vehicle safety:

a. Each tracked vehicle will have a Track Commander (TC) who must ride in the commander's hatch with only head and shoulders exposed. The TC must be a licensed driver.

b. The movement of a tracked vehicle without a TC and working intercom is prohibited.

c. Tracked vehicles will not be started unless the portable and fixed fire extinguishers are present and in operating condition. During maintenance operations, portable fire extinguishers are acceptable.

d. Before lowering or raising the ramp, the rear area will be checked for clearance and the horn sounded twice. On M113 series vehicles, the deflective ramp will be marked "Free Fall Ramps" on the ramp and sides of the vehicle. A tow cable will be used to secure free fall ramps.

e. Open hatch covers will be tested by shaking them to ensure the latches are locked in position. Open hatch covers will be securely fastened with the positive pin to preclude accidental closing during movement of the track.

f. Wearing of rings or other jewelry by personnel riding in or operating tracked vehicles is prohibited.

g. Protective headgear, such as the TC helmet (CVC), or kevlar helmet will be worn with the chin strap buckled by personnel in tracked vehicles.

h. All personnel exposed to eye hazards will wear eye protection. Eye protection is mandatory for TC and driver while the vehicle is in operation.

i. Two ground guides per vehicle will walk 2 meters to the left of the vehicle when space permits, and 10 meters to the front and rear of the vehicle. Ground guides will be used at all times while maneuvering in or near bivouac areas.

j. Personnel will be cautioned never to position themselves between a track with the engine running and another track or fixed object.

k. Vehicle drivers will maintain a minimum interval of six meters between vehicles when at the halt or when engines are idling. For administrative parking, e.g., in a holding area, vehicles will be parked side by side or in a herringbone or staggered formation but not bumper to bumper.

l. Personnel riding in tracks will be cautioned to remain inside the track in the event the vehicle starts to roll over.

m. Personnel will ride with their bodies inside the vehicle. Those in hatches will not expose more than head and shoulders.

n. Riding on top of tracks is prohibited. All exceptions will be reviewed and approved by the SBSD. This prohibition is not in effect during swimming operations.

o. Seat belts will be worn at all times except during swim operations.

p. Drivers will be licensed in the vehicle they are operating. Training will include emergency evacuation procedures.

q. Personnel will not be permitted to rest or sleep beneath or on top of tracked vehicles. Commanders will designate sleeping areas that provide maximum safety for personnel.

r. Personnel will not sleep in vehicles with engines running.

s. Vehicles must follow speed limits where posted (if lower than stated convoy speed).

t. Operation of tracked vehicles will, whenever possible, will be confined to tank trails and to unpaved roads. When tracked vehicles move on paved roads or into cantonment areas, units will provide escort vehicles front and rear. On short stretches of paved road, road guards may be used in place of escort vehicles to slow and warn approaching traffic. Escort vehicles will be AMVs and use their emergency flashers.

u. When tracks move on heavily traveled main thoroughfares, Provost Marshal and Public Affairs will be notified before the date, hour, roads, and type and number of vehicles.

v. When driving on paved roads, extreme caution will be used by tracked vehicle drivers to prevent damage to the road surface. Highly accelerated starts and sharp turns will be avoided. Drivers will keep both tracks fully on the pavement.

w. When tracked vehicles in convoy cross intersections, road guards with proper equipment (High visibility/reflective vests/sashes and lights when appropriate) will be stationed far enough from the intersection to permit control of traffic.

x. Single tracked vehicles crossing intersections will come to a full stop and proceed across only when the way is clear.

y. Radio-equipped tracks operating near power lines will have antenna tied down to ensure three meters of clearance below power lines.

z. Tracked vehicles broken down on roadways or tank trails during hours of darkness must be adequately marked to protect traffic. Commanders will ensure that chemical lights or Highway Warning Kits are available in sufficient quantities to comply with this requirement.

aa. Engine cooling compartment access panels on M113 series tracks will be installed at all times during operation. It is the TCs responsibility to ensure that the panels seal properly to prevent carbon monoxide from entering the crew compartment.

bb. Mortar ammunition will not be prepared for firing inside a mortar carrier. The ramp should be down when firing the mortar for training. Residue from firing charges will not be permitted to accumulate inside mortar carrier.

18-6. Refueling Procedures.

a. Turn engine off before fuel transfer operations.

b. Prohibit smoking, open flames, or vehicle operation within 16 meters while refueling or draining fuel tanks.

c. Refuel/defuel outdoors only.

d. Vehicles must be grounded IAW FM 10-69 before fuel transfer operations. When fueling a vehicle from a fuel tank truck, be sure the bonding cable between the two vehicles is in place. Ensure the bonding cable is in good condition.

e. Passengers will not be allowed inside a vehicle while refueling.

f. Vehicles waiting to be refueled must be at least 16 meters from the fueling source.

g. If a fuel spill occurs all refueling operations will be immediately suspended and the fire department will be notified.

18-7. Towing Tracked Vehicles.

a. A disabled vehicle will be towed by a vehicle of equivalent or higher weight class.

b. Towing hookups and procedures in TM's and FM 20-22, Vehicle Recovery Operations, will be followed.

c. Personnel other than the driver are prohibited from riding in the towed vehicle.

d. Tracked vehicles will tow not more than one vehicle at a time.

18-8. Convoy Operations.

a. During travel, all vehicles will maintain at least 50 meter intervals. For night convoy operations requiring blackout marker lights, procedures outlined in FM 21-305, Manual for the Wheeled Vehicle Driver, or FM 21-306, Manual for the Track Combat Driver will be used.

b. Vehicles traveling in convoy will have, as a minimum, a senior occupant of the rank SGT(E-5) or above in the lead and rear vehicles. Nothing smaller than a 2 1/2 ton truck will be used as the rear vehicle. No troops will be carried in the rear of the vehicle.

c. Disabled vehicles will await a maintenance vehicle. The disabled vehicle will be attended by the vehicle's driver and assistant driver. Other personnel and the load will be transferred to other vehicles if feasible.

18-9. Severe Weather.

a. Each battalion or equivalent will be prepared to deal effectively with hazards associated with severe weather such as heat, cold, ice/snow, lightning, tornados, etc.

b. Each battalion or equivalent will prepare a written plan for dealing with such hazards and will ensure all personnel are familiar with the plan.

CHAPTER 19
AVIATION SAFETY

19-1. Purpose. To establish the Fort Gordon Aviation Accident Prevention effort as an integral part of the Fort Gordon Safety Program.

19-2. Applicability.

a. This chapter applies to all operations and personnel participating in aviation activities which operate, maintain and support aircraft operating on Fort Gordon..

b. Applicable requirements of this chapter will be made a part of the safety programs of contractors engaged in maintenance, industrial, ground, and flight operations when the government has assumed the risk of loss or damage.

19-3. Responsibilities.

a. The SBSD Safety Manager will incorporate aviation safety into the total safety program, and establish a close working relationship with the aviation safety element.

b. The Airfield Commander will:

(1) Establish a commander's accident prevention program. Although the unit SOP may incorporate much of the program, a separate program will be developed.

(2) Ensure using units have a full time, school trained Aviation Safety Officer (ASO) assigned to a primary duty position.

(3) Ensure the ASO has programmed adequate resource support to include any "aviation specific" safety awards.

(4) Ensure that a listing is prepared and maintained of personnel qualified IAW AR 385-40 to serve on an Army aircraft accident investigation board. The list should include the aviator's name, rank and aircraft qualifications.

(5) Ensure that all aircraft refueling is halted when lightning is within 5 miles of the Center.

c. The Unit Aviation Safety Officer will:

(1) Manage the safety program at the airfield/unit.

(2) Be the commander's representative on all aviation safety matters. This includes providing guidance and recommendations to all aviation activities and units on the installation.

(3) Organize and ensure completion of semi-annual Aircraft Accident Prevention Surveys. The ASO will ensure that all programs with safety impact are evaluated.

(4) Ensure airfield/unit safety bulletin boards and aviation safety functional files are maintained.

(5) Act as recorder for aviation safety councils.

(6) Manage the aviation safety awards program.

(7) Establish an ongoing analysis program to identify current and projected safety issues and recommended solutions.

(8) Report all recordable mishaps in a timely fashion and act as POC for chain of command questions.

(9) Provide guidance to the airfield commander on safety matters and safety training.

19-4. General.

a. All aviation unit commanders will establish a commander's accident prevention program tailored to the unit and it's mission. A unit safety SOP will be generated as part of the accident prevention program.

b. Aviation Safety Meetings.

(1) An Aviation Safety meeting for safety education and awareness will be conducted monthly. The monthly meeting minutes will include a roster of personnel absent as well as subjects covered. A make up system will be devised and implemented. Minutes of the meetings and records of attendance will be kept for two years.

(2) Required training, such as weather briefings, aeromedical training, etc. must be conducted by subject matter experts (Air Force weather personnel, Flight Surgeons, etc.). All flight crewmembers should participate in required classes, such as aeromedical training, together.

(3) Aviation Commanders will develop means to deal with personnel who routinely miss aviation safety meetings (such as restriction of flying duties).

c. Foreign Object Damage (FOD).

(1) Because of FOD and personal injury potential, exposed rings and watches will not be worn when inspecting or maintaining aircraft.

(2) All headgear will be secured before going on the flight line. The only "soft cap" worn on the flight line will be the issue "cap, cold weather." When worn, the ear flaps of the cold weather cap will be pulled down and secured.

d. Risk Management.

(1) Commanders are responsible for assuring that risk management procedures are developed and implemented in all exercises and mission plans. The aircrew mission briefing will incorporate the risk assessment in paragraph 3j of DA Form 5434-R.

(2) Units may establish a list of routine missions which are considered "low" risk.

e. Post Aviation Accident Actions.

(1) The SBSD will be notified as soon as possible whenever an aircraft is involved in a Class A, B or C mishap regardless of who owns the aircraft. Initial notification will be telephonic to the SBSD (538-SAFE) or the MP Desk (533-2181) after duty hours. Follow up information may be provided via electronic mail (PROFS). The follow up information will include:

(a) Date/Time of Accident.

(b) Location of Accident.

(c) Owning Organization.

(d) Type of Aircraft.

(e) Injuries/Fatalities.

(f) Extent of Damage.

(g) Synopsis of Accident.

(h) Other Remarks. (Crew experience, weather, NVGs used, previous accidents of crew, collateral accident investigation requested, etc.). This is in addition to the requirements outlined in AR 385-40 for accident notification.

(2) Secure the accident site. Procedures will be developed for both short and long term security of an aviation accident site. These procedures should be coordinated with the Military Police and local law enforcement activities.

(3) Blood and urine samples will be taken immediately by the appropriate medical facility for all Class A-C aviation accidents and processed using formal chain of custody procedures.

(4) Aircraft damaged or suspected of damage will not be flown until cleared for flight by qualified maintenance personnel. When appropriate, maintenance records will be secured by the unit for investigation board.

f. General Aviation Safety.

(1) The appropriate check list will be used for preflighting, postflighting, before take off and before landing checks. The call and response method to verify actions will reduce human error accidents due to forgetfulness.

(2) If issued, the SPH-4 helmet will be worn by all aviation personnel participating in rotary wing flights (not just crewmembers) unless waived by the installation commander or HQ TRADOC.

CHAPTER 20
HAZARD COMMUNICATION PROGRAM

20-1. Responsibilities.

a. The SBSD will:

(1) Establish and manage the implementation of the Hazard Communication Program at Fort Gordon.

(2) Monitor that all personnel are informed of their responsibilities and rights under the Hazard Communication Program.

(3) Inspect compliance of directorates, activities, units, tenants, and contractors with the procedures and intent of 29 CFR 1910.1200 during annual Safety and Occupational Health Inspections.

(4) Maintain a list of hazardous chemicals used or stored on the installation.

(5) Coordinate and implement the Hazard Communication Program training.

b. Preventive Medicine Service, U.S. Army Medical Command (EAMC) will:

(1) Provide industrial hygiene support for the identification and evaluation of potentially hazardous chemicals and materials.

(2) Provide medical surveillance in accordance AR 40-5 for workers exposed to hazardous chemicals and materials.

c. The Directorate of Public Works will:

(1) Ensure that all hazardous chemicals are properly identified and labeled upon receipt, during storage, and when issued. When shipped off the installation, labeling guidelines outlined in this chapter will be adhered to.

(2) Forward one copy of MSDSs received with hazardous chemical or material shipments to the SBSD, ATTN: ATZH-PSB. One copy of the MSDS will be retained with the shipment in storage and one copy will accompany the hazardous chemical to the user upon delivery.

d. Commanders, directors, and tenants will:

(1) Ensure that all personnel in their organization are trained on the Hazard Communication Program and their rights and responsibilities under that program.

(2) Ensure that first line supervisors provide safety orientation and training to employees in their assigned work areas. All training will be documented.

(3) Ensure that engineering controls, protective clothing and equipment or administrative controls provided and used for employee health and safety and protection of the environment have SBSD or the PMS approval prior to use.

(4) Establish procedures to locally maintain, update quarterly as a minimum, a listing of hazardous chemicals and materials used by their organization. A copy of this listing will be provided to the SBSD, ATZB-PSB (Spec Ops) each March and September. A copy will be available at the unit for review, upon request, by safety, health, and emergency personnel.

(5) Ensure that each work area maintains an MSDS for each hazardous material used or stored in that area.

e. First-line supervisors will:

(1) Maintain a listing of hazardous chemicals and materials used or stored to their work area. Quarterly forward copies of hazardous chemical lists to the SBSD, ATTN: ATZS-PSB

(2) Obtain an MSDS for each hazardous chemical or material.

(3) Make MSDSs and hazardous chemical list available to employees upon request. MSDS's must be readily available to employees on all shifts.

(4) Provide information and training to new employees, regarding the Hazard Communication Program to include any standing operating procedures (SOPs), personal protective equipment, etc. Training requirements and procedures are outlined in this document.

(5) Provide the required personal protective equipment and enforce compliance with the MSDS requirements.

(6) Prepare SOPs for nonroutine tasks (cleaning dip tanks, vapor degreasers). Forward copies of SOPs to the SBSD.

(7) Request MSDS from suppliers when ordering hazardous chemicals. Annotate this request on DA Form 3953 (Purchase and Commitment).

(8) Notify Installation Safety Office of changes to chemical lists.

(9) Supervisors must ensure that this written Hazard Communication Program is available to employees or their designated representatives and other authorized Government officials upon request.

(10) Provide MSDSs for chemicals not having a NSN to the SBSD.

f. Contractors will:

(1) Provide information through the COR to the SBSD regarding any hazardous chemicals their employees will be using to which other personnel in the area may be exposed.

(2) Comply with the Hazard Communication Standard, 29 CFR 1910.1200, while working on Fort Gordon.

g. Employees will:

(1) Review MSDSs and local SOPs and become familiar with the hazards associated with the chemical, and the first aid and emergency procedures.

(2) Check labels and MSDSs on incoming containers for information about the chemical, and handle the materials accordingly.

(3) Follow proper storage and handling procedures for hazardous chemical.

(4) Report all leaks and spills of hazardous chemicals.

(5) Wear prescribed personal protective equipment.

(6) Practice good personal hygiene and working habits around chemicals.

20-2. Hazardous Chemical Inventory.

a. A hazardous chemical inventory must contain the same name for the chemical material as shown on the label and MSDS.

b. The SBSD maintains a list of hazardous chemicals present on Fort Gordon and their location. This list will be provided to Preventive Medicine Activity, Fire Department, Provost Marshal and Environmental Division, Directorate of Public Works.

c. First-line supervisors must maintain an inventory of hazardous chemicals used in individual work areas. This inventory will be kept with the MSDS for that work area.

d. The hazardous chemical inventory will be updated quarterly and will be amended each time a new hazardous chemical is introduced into a work area. As a minimum the list will contain the following information:

(1) Organization.

(2) Building and room number.

(3) Name and extension of preparer.

(4) Name of Chemical.

(5) NSN.

(6) Maximum quantity on hand.

(7) Type of container.

e. Provide a copy of the original list and updates to the SBSD, ATTN: ATZS-PSB.

20-3. Policy for Hazardous Material.

a. Prior to exposure, personnel who work with or may be occupationally exposed to hazardous chemicals will be informed, through training, of the hazards, protective equipment, and actions necessary to avoid or minimize their exposure.

b. The quantity of hazardous chemicals and materials stocked by any user will not exceed the quantity necessary to satisfy operational requirements. Where less hazardous or non-

hazardous chemicals are capable and feasible to accomplish a task, they will be substituted and used.

c. New systems, equipment, operational, and maintenance procedures will be designed to minimize the use of hazardous chemicals or materials. Where the use of hazardous chemicals or materials is necessary, adequate engineering controls, protective clothing and equipment, and administrative controls will be used to ensure the health and safety of exposed personnel and to protect the environment.

d. Personnel will not use products containing hazardous chemicals or materials, except as authorized by the SBSD, if:

(1) An MSDS for the product is not on file.

(2) Required protective clothing and equipment is not available.

20-4. Labeling.

a. Hazardous warning markings and labels are necessary to show the hazardous nature of the contents during all stages of the life cycle.

b. When packages or containers are removed from a labeled container for use or further distribution, the continuity of information will be preserved.

c. All labels will identify the hazardous chemical or material contained within and provide appropriate hazard warnings.

d. Supervisors will ensure that as products are removed from a shipping container or unit packaging that appropriate labels are applied to the product before its use or further distribution.

e. Labels will be placed in such a manner as not to obscure other warnings, instructions, or information.

20-5. Transportation Labels.

a. When hazardous chemicals or materials are shipped off the installation, they will be identified using the Department of Transportation (DOT) labels.

b. The specific information may be obtained by cross referencing the National Stock Number (NSN) with the DOD Hazardous Material Information System (HMIS). Information on

many nonstock items is also available and is cross referenced by part number, trade name, specification, and Federal Supply Code for the manufacturer. Instructions for using the HMIS microfiche are provided in DOD 6050.5-M, DOD HMIS Procedures Manual.

c. The four-digit UN/NA number may be placed on containers. DOT labels and markings will be in strict compliance with Title 49 CFR and will not be applied to unregulated materials.

20-6. Alternative Labeling.

a. Where the labeling of every container is either impractical or inappropriate, alternative means of labeling may be used. These methods must provide the name information contained on a label. Alternate forms of labeling include:

(1) Placarding.

(2) Batch processing papers.

(3) Shipping papers.

(4) Other forms approved by the SBSD.

b. Where an individual's work requires that a small amount of a hazardous chemical be used, labeling is not required when the following conditions are met:

(1) The chemical is used only by the individual who obtained it from the original container.

(2) The amount of chemical in the unlabeled container does not exceed what is required for the work shift.

(3) The individual using the chemical can maintain control and security of the container while it contains the unlabeled chemical.

c. The following chemicals are exempt form the labeling requirements IAW 29 CFR 1910.1200:

(1) Pesticides subject to labeling under the Federal Insecticide, Fungicide and Rodenticide Act and the EPA.

(2) Wood and wood products.

(3) Food, drugs, and cosmetics intended for personal use.

(4) Consumer products used/stored in the workplace in the same manner as normal consumer use.

20-7. Training Requirements.

a. All personnel in the work area who use or who may be exposed to a hazardous chemical or material must receive information and training on hazardous chemicals in their work area. Training is required at the time of their initial assignment and whenever a new hazard is introduced into their work area.

b. Supervisors and employees will receive basic DOD Hazard Communication Training from the SBSD. Additionally, employees will be trained by their supervisors about safe procedures for specific chemicals in their workplace. As a minimum this training will include the information contained on the MSDS for each chemical and will be documented.

20-8. Documentation of training.

a. Training for all affected personnel will be documented with DD Form 1556 (Request, Authorization, Agreement, Certificate of Training and Reimbursement) and filed in the SBSD.

b. The form will contain the following statement: "Do not destroy, retain this record for duration of employment/enlistment plus 30 years."

c. The form will be signed by the employee and the instructor.

Chapter 21
BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

21-1. Purpose: To comply with the OSHA Bloodborne Pathogens standard, 29 CFR 1910.1030. the following exposure control plan has been developed:

21-2. Responsibilities.

a. The Occupational Health Section, DDEAMC will:

(1) Publish and update as needed a bloodborne pathogens exposure control plan for non-medical personnel.

(2) Provide training to non-DDEAMC personnel.

b. DDEAMC will:

(1) Publish and update it's own bloodborne pathogens exposure control plan for personnel routinely exposed to bloodborne pathogens.

(2) Provide appropriate medical surveillance and immunizations to personnel covered under this plan.

21-3. Program Requirements:

a. Exposure Determination:

(1) OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment.) This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. At this facility the following job classifications are in this category:

(a) Military Police
(b) Police Officers
(c) Firefighters
(d) Lifeguards
(e) Child Care Workers

(f) Emergency Medical Technician
(g) Medical Euipment Repair Person

(2) In addition, OSHA requires a listing of job classifications in which some employees may have occupational exposure. Since not all the employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks or procedures that would cause these employees to have occupational exposure are also required to be listed in order to clearly understand which employees in these categories are considered to have occupational exposure. The job classifications and associated tasks for these categories are as follows:

Job Classification	Tasks/Procedures
Janitorial	Cleaning Contaminated Area
Safety Personnel	On scene Accident Investigation

b. Implementation Schedule and Methodology: OSHA requires that this plan include a schedule and method of implementation for the various requirements of the standard. The following complies with this requirement:

(1). Compliance Methods:

(a) Universal precautions will be observed in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual.

(b) Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees. Where occupational exposure remains after institution of these controls, personal protective equipment will also be utilized. The following engineering controls will be utilized: sharps containers, protective gloves, medical waste bags for contained clothing/equipment. Any contaminated laundry sent to the main post laundry will be identified by use of medical waste laundry bags. The controls will be examined and maintained on a regular schedule. The schedule for reviewing the effectiveness of the controls is a follows: supervisor will check at least weekly that the above controls are in place and the all needed equipment is available.

(c) Handwashing facilities are also available to the employees who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after incurring exposure. Handwashing facilities are located: in restroom, and locker rooms.

(d) If handwashing facilities are not readily accessible, use either an antiseptic cleanser in conjunction with a clean cloth/paper towels or antiseptic towelettes. If these alternatives are used then the hands are to be washed with soap and running water as soon as possible. Alternate handwashing equipment should be located in all patrol vehicles and fightfighting vehicles. Supervisors will ensure that adequate supplies are maintained.

(e) After removal of personal protective gloves, employees will wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water.

(f) If employees incur exposure to their skin or mucous membranes than those areas will be washed or flushed with water as appropriate as soon as feasible following contact.

(2) Needles. Contaminated needles and other contaminated sharps will not be bent, recapped, removed, sheared or purposely broken.

(3) Work Area Restrictions. In areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials are present.

(4) Specimens. Specimens of blood or other potentially infectious materials will be placed in a container which prevents leakage during the collection, handling, processing, storage, and transport of the specimens. The container used for this purpose will be labeled or color coded in accordance with the requirements of the OSHA standard. If outside contamination of the primary container occurs, the primary container will be placed within a secondary container which prevents leakage during the handling, processing, storage, transport, or shipping of the specimen.

(5) Contaminated Equipment. Equipment which is or maybe contaminated with blood or other potentially infectious materials will be examined prior to servicing or shipping and will be decontaminated as necessary unless the decontamination of the equipment is not feasible. Equipment will be appropriately packaged and forwarded to the agency or service that can decontaminate the equipment when local decontamination is not possible. Appropriate protective measures should be taken by personnel decontaminating potentially infectious equipment.

(6) Personal Protective Equipment.

(a) All personal protective equipment used at this facility will be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

(b) Protective clothing will be provided to employees in the following manner: Personnel covered by this plan will be provided with latex gloves in all areas or vehicles where exposure to infectious materials is possible. Supervisors will ensure that needed equipment is always available.

(c) All garments which are penetrated by blood will be removed immediately or as soon as possible. All personal protective equipment will be removed prior to leaving the work area/scene. All contaminated garments will be placed in medical waste bags. Gloves will be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes.

(d) Supervisors will appoint an individual responsible for the distribution of gloves and ensure that each employee knows who this individual is. Gloves will be used for the following procedures: first-aid, accident scene investigations where scene is contaminated, and any other time when the potential for exposure to body fluids is possible.

(e) Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised. Gloves will be changed between working on victims to ensure that one victim is not contaminated with the bodily fluids of another victim.

(f) Decontamination will be accomplished by utilizing bleach solutions or EPA registered germicides.

(g) All contaminated work surfaces will be decontaminated after completion of procedures and immediately or as soon as possible after any spill of blood or other potentially infectious materials, as well as the end of the work shift if the surface may have become contaminated since the last cleaning.

(h) Any broken glass which may be contaminated will not be picked up directly with the hands. The following procedures will be used: gloves will be worn and glass will be swept into a dustpan or waste container for disposal.

(i) Regulated Waste Disposal. All contaminated sharps will be discarded as soon as feasible in sharps containers which are located at the Eisnehower Army Medical Center emergency room. Regulated waste other than sharps will be placed in appropriate containers.

(j) Laundry Procedures. Laundry contaminated with blood or other potentially infectious materials will be handled as little as possible. Such laundry will be placed in appropriately marked bags at the location where it was used. Such laundry will not be sorted or rinsed in the area of use. All employees who handle contaminated laundry will utilize personal protective equipment to prevent contact with blood or other potentially infectious materials. Laundry at this facility will be cleaned at the main post laundry. The laundry will be notified that the laundry is potentially infectious.

(7) Hepatitis B Vaccine

(a) All employees who have been identified as having exposure to blood or other potentially infectious materials will be offered the Hepatitis B vaccine, at no cost to the employee. The vaccine will be offered within 10 working days of their initial assignment to work involving the potential for occupational exposure to blood or other potentially infectious materials unless the employee has previously had the vaccine or who wishes to submit to antibody testing which shows the employee to have sufficient immunity.

(b) Employees who decline the Hepatitis B vaccine will sign a waiver which uses the wording in Figure 21-1. Military personnel may not decline the vaccine except in accordance with applicable Army regulations.

(c) Employees who initially decline the vaccine but who later wish to have it may then have the vaccine provided at no cost.

(d) Supervisors will ensure that vaccine is offered to all employees. Vaccinations are available through the Occupational Health Clinic. Supervisors will make the appointments and ensure appointments are kept.

(8) Post-Exposure Evaluation and Follow-up. When the employee incurs an exposure incident, it should be reported to the Occupational Health Clinic. All employees who

incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. This follow-up will include the following:

(a) Documentation of the route of exposure and the circumstances related to the incident

(b) If possible, the identification of the source individual and, if possible, the status of the source individual. The blood of the source individual will be tested (after consent is obtained) for HIV/HBV infectivity.

(c) Results of testing of the source individual will be made available to the exposed employee with the exposed employee informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual.

(d) The employee will be offered the option of having their blood collected for testing of the employees HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status. However, if the employee decides prior to that time that testing will or will not be conducted then the appropriate action can be taken and the blood sample discarded.

(e) The employee will be offered post exposure prophylaxis.

(f) The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.

(9) Interaction with Health Care Professionals. A written opinion will be obtained from the health care professional who evaluates employees of this facility. Written opinions will be obtained in the following instances:

(a) When the employee is sent to obtain the Hepatitis B vaccine.

(b) Whenever the employee is sent to a health care professional following an exposure incident.

(10) Training.

(a) Training for all employees will be conducted at initial assignment to tasks where occupational exposure may occur. Training will be conducted by appointment with the Safety Division.

(b) Training for employees will include the following:

1) the OSHA standard for Bloodborne Pathogens
2) Epidemiology and symptomatology of bloodborne diseases
3) Modes of transmission of bloodborne pathogens
4) This Exposure Control Plan, i.e. points of the plan, lines of responsibility, how the plan will be implemented)
5) Procedures which might cause exposure to blood or other potentially infectious materials
6) Control methods which will be used at the facility to control exposure to blood or other potentially infectious materials, including handwashing
7) Personal protective equipment available and who should be contacted
8) Post Exposure evaluation and follow-up
9) Signs and labels used at the facility
10) Hepatitis B vaccine program at the facility

(11) Recordkeeping. All medical records required by the OSHA standard will be maintained by the medical treatment facility. All training records will be maintained by the supervisor and the Safety Division.

(12) Dates.

(a) All provisions required by the standard will be implemented by: 31 MAY 1997.

(b) Training will be conducted using videotapes, written material, and classroom instruction. The Preventive Medicine Activity is responsible for this training.

(c) All employees will receive annual refresher training. Supervisors will maintain records of employee training and schedule refresher training with the Preventive Medicine Activity.

Chapter 22
RISK MANAGEMENT

22-1. Risk Management

a. The risk management process will be used by all USASC&FG units to assess and control the risk associated with all potentially hazardous operations.

b. All units using a Fort Gordon range will use the risk management process to assess and control the risk associated with their range operation.

c. Supervisors will ensure that their personnel understand the risks associated with their operations.

d. Figure 22-1 lists the five basic steps, and the definitions used in the Risk Management process. Figures 22-2 and 15-3 are examples of how to document the risk management process. More Figures 22-1, 2, and 3 are available from the SBSD. The SBSD provides training on the risk management process.

e. The decision levels for FTXs and lesson plans are described in Chapter 15, Branch Safety. For other operations, the low risk operations can be approved locally. For every level of risk above low, the approval level is one level of command higher.

Four principles of Risk Management

1. Accept no unnecessary risk
2. Make risk decisions at the right level
3. Accept risks when the benefits outweigh the costs
4. Manage risk in the concept and planning stages of operations

Basic Risk Management Process

1. Identify: List the hazards
2. Assess: Determine the risk of each hazard
3. Decide: Reduce risk to appropriate level for mission
4. Control: Develop and implement controls
5. Supervise: Ensure controls are followed, get feedback

Hazard Severity Definitions

I Catastrophic Death or permanent disability, system loss, major property damage, not mission capable

II Critical Permanent partial disability, temporary total disability more than 3 months, major system damage, significant property damage, significantly degrades mission capabilities

III Marginal Minor injury, lost workday accident, compensable injury/illness, minor system damage, minor property damage, degrades mission capabilities

IV Negligible First aid or minor supportive medical treatment, minor system impairment, small or no impact on mission capabilities

Hazard Probability Definitions

A Frequent
Individual soldier Occurs often in career
All soldiers exposed Continually experienced

B Probable
Individual soldier Occurs several times in career
All soldiers exposed Occurs frequently

C Occasional

Individual soldier	Occurs sometime in career
All soldiers exposed	Occurs sporadically

D Remote

Individual soldier	Unlikely but possible to occur in career
All soldiers exposed	Occurs seldom

E Improbable

Individual soldier	So unlikely can assume will not occur in career
All soldiers exposed	Occurs vary rarely

FIGURE 22-1

U.S. Army Signal Center and Fort Gordon
Risk Management

POI: SBSD-12 Title: Introduction to Risk Management

HS - Hazard Severity

I Catastrophic
II Critical
III Marginal
IV Negligible

HP - Hazard Probability

A Frequent
B Probable
C Occasional
D Remote
E Improbable

HS

HP

	A	B	C	D	E
I	E	E	H	H	M
II	E	H	H	M	L
III	H	M	M	L	L
IV	M	L	L	L	L

Risk Levels: E - Extremly High H - High M - Medium L - Low

Hazards Identified	HS	HP	Risk
1. Students backing car into telephone pole	II	D	M
2.			
3.			
4.			

Control Measures	Residual Risk
1. Hazard marking tape on pole, warn students	L
2.	
3.	
4.	

Approval:

Approval Level: Course Manager

Training approved by Course Manager 23 Nov 93

FIGURE 22-2

U.S. Army Signal Center and Fort Gordon
Risk Management

Unit: SBSD Location: East Range Date: 7 Dec 93

Mission or task: Removal of Radium Faced Gauges

HS - Hazard Severity

I Catastrophic
II Critical
III Marginal
IV Negligible

HP - Hazard Probability

A Frequent
B Probable
C Occasional
D Remote
E Improbable

Risk Matrix

	A	B	C	D	E
I	E	E	H	H	M
II	E	H	H	M	L
III	H	M	M	L	L
IV	M	L	L	L	L

Risk Levels: E - Extremly High H - High M - Medium L - Low

Hazards Identified	HS	HP	Risk
1. Radium ingestion	II	D	M
2. Slip and fall in tank	II	C	M
3. Oxygen deficient/Hydrogen Sulfide in tank	I	D	H
4. Animal Bites	III	D	C

Control Measures	Residual Risk
1. PPE: full face respirator, Tyvek suit	L
2. Fire Dept HAZMAT team on stand-by	L
3. Confined space entry procedures/gas monitor	L
4. See #2 above	L

Approval:

Low residual risk: Local approval

Reference phonecon 18 Oct 93, approved by DPS

FIGURE 22-3

APPENDIX A
REFERENCES

AR 11-34	Army Respiratory Protection Program
AR 15-6	Procedure for Investigating Officers and Board of Officers
AR 25-400-2	Modern Army Recordkeeping System
AR 40-5	Preventive Medicine
AR 45-29	Military Convoy Operation in CONUS
AR 190-5	Motor Vehicle Traffic Supervision
AR 190-11	Physical Security of Arms, Ammunition and Explosives
AR 190-40	Serious Incident Report
AR 195-2	Criminal Investigation Activities
AR 385-10	Army Safety Program
AR 385-11	Ionizing Radiation Protection, Transportation, Disposal, and Radiation Safety
AR 385-14	Accident/Incident Report-Shipment of ConventionalExplosives & Dangerous Articles By Commercial Carriers
AR 385-15	Water Safety
AR 385-16	System Safety
AR 385-26	Use of Explosive and Pyrotechnics in Public Demonstrations, Exhibitions, and Celebrations
AR 385-30	Safety Color Code Marking and Signs
AR 385-32	Protective Clothing and Equipment
AR 385-40	Accident Reporting and Records
AR 385-55	Prevention of Motor Vehicle Accidents
AR 385-60	Coordination with Armed Services Explosive Board
AR 385-61	Safety Programs for Chemical Agents and Associated Weapons Systems
AR 385-62	Firing Guided Missiles and Heavy Rockets for Training, Target Practice and Combat
AR 385-63	Policies and Procedures for Firing Ammunition for Training, Target Practice and Combat
AR 385-64	Ammunition and Explosive Safety Standards
AR 385-65	Identification of Inert Ammunition and Ammunition Components
AR 385-95	Army Aircraft Accident Prevention
AR 600-55	Motor Vehicle Driver Selection, Testing, and Licensing
DA PAM 385-1	Unit Safety Management
DA PAM 385-3	Protective Clothing and Equipment
DA PAM 385-5	Fundamentals of Safety in Army Sports and

	Recreation
DA PAM 385-6	Safety in Recreational Water Activities
DA PAM 385-7	Firearms and Archery Safety
TB Med 81	Cold Injuries
TB Med 269	Carbon Monoxide; Symptoms, Etiology, Treatment and Prevention of Overexposure
TB Med 501 Hearing	Occupational and Environmental Health - Conservation with Change 1
TB Med 506	Occupational Vision Program
TB Med 507	Treatment and Control of Heat Injury
TB 43-0142	Safety Inspection and Testing of Lifting Devices
TB 385-2	Nuclear Weapons Firefighting Procedures
TB 385-4	Safety Precautions for Maintenance of Electrical/ Electronic Equipment
TB 385-5	Safety Manual: Crawler Tractor/Loader for Operating and Maintenance Personnel
TB 385-6	Sixty Rules on Safety for Cranes and Excavators Ued By Operating and Maintenance Personnel
TB 385-7	Safety Manual: Off-Highway Truck for Operating And Maintenance Personnel
TB 385-8	Safety Manual: Wheel Type Loader/Dozer for Operating And Maintenance Personnel
TB 385-9	Safety Manual: Motor Grader for Operating and Maintenance Personnel
TB 385-10	Safety Manual: Scrapers for Operating and Maintenance Personnel
TB 385-101	Safe Use of Cranes, Crane Shovels, Draglines, and Similar Equipment Near Electrical Power Lines
TB 750-1047	Elimination of Combustibles from Interiors of Metal or Plastic Gasoling and Diesel Fuel Tanks
TR 385-2	TRADOC Safety Program
FM 10-22	Vehicle Recovery Operations

FG Reg 210-13	Registration of Privately Owned Weapons
Guide for Supervisors, Federal Employee Compensation Act (FECA)	
29 CFR 1910	General Industry Standards
10 CFR 19,20,21	Nuclear Regulatory Commission Standards
NFPA 70	National Electric Code
NFPA 101	Life Safety Code

APPENDIX B
DEFINITIONS

ABATE: To eliminate or reduce an OSH hazard by complying with OSH standards criteria or taking equivalent protective measures.

ADMINISTRATIVE CONTROLS: Use of information, training, shift schedules, work practices, housekeeping, and monitoring to reduce or eliminate exposures.

AIRBORNE: Word used to describe something that is in the air.

ARMY ACCIDENT: An unplanned event or series of events that result in one or more of the following:

a. Damage to Army Property

b. Injury to military personnel, on or off duty

c. Injury to on-duty Army civilian personnel

d. Occupational illness to military, civilian or nonappropriated fund employee

e. Injury, illness or property damage to non-Army personnel as a result of Army operations.

ARMY MOTOR VEHICLE: Any vehicle that meets the following criteria:

a. A vehicle that is owned, leased, or rented by the DA or Reserve Components.

b. A vehicle that is primarily designed for over-the-road operation.

c. A vehicle whose general purpose is the transportation of cargo or personnel. Examples are passenger cars, station wagons, trucks, ambulances, buses, motorcycles, fire trucks, and refueling vehicles. Also included in this category are tactical wheeled vehicles.

ASPHYXIATION: Suffocation; paralyzed muscles which control breathing; person loses consciousness or dies because he can't breathe.

ATMOSPHERE: Refers to the gases, vapors, mists, fumes, and dusts within a confined space.

ATTENDANT: A person trained in emergency rescue procedures and assigned to remain on the outside of the confirmed space and to be in communication with those working inside.

CEILING LIMIT: The maximum airborne concentration of a toxic agent to which an employee may be exposed for a specified period of time (ceiling equals 15 minutes).

CHEMICAL CONTAINER: Bags, barrels, bottles, boxes, cans, cylinders, drums, reaction vessels, storage tanks, and other vessels is used to hold chemicals.

CHEMICAL HAZARD: Any chemical material that can cause health problems, fire, explosion, or other dangerous situations.

COMBUSTIBLE DUST: A dust capable of undergoing combustion or burning when subjected to a source of ignition.

COMBUSTIBLE LIQUID: Liquid having a flash point at or above 100 degrees but below 200 degrees Fahrenheit.

COMPRESSED GAS: Gas stored inside a container at a present much higher than normal air pressure; contains a lot of stored energy; a physical hazard due to the potential for sudden release of the stored energy when the gas expands.

CONFINED SPACE: Refers to a space which by design has limited openings for entry and exit; unfavorable natural ventilation which could contain or produce dangerous air contaminants, and which is not intended for continuous employee occupancy. Confined spaces include but are not limited to storage tanks, compartments of ships, process vessels, pits, silos, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, sewers, tunnels, underground utility vaults, and pipelines.

CONFINED SPACE A: A confined space that presents a situation that is immediately dangerous to life or health (IDLH). These include but are not limited to oxygen deficiency, explosive or flammable atmospheres, and/or concentrations of toxic substances.

CONFINED SPACE B: A confined space that has the potential for causing an injury and/or illness if preventive measures are not used, but not immediately dangerous to life or health.

CONFINED SPACE C. A confined space in which the potential hazard would not require any special modification of the work procedure.

CORROSIVE: Capable of being eaten away gradually as if by gnawing, especially by chemical action.

ENGINEERING CONTOLS: Use of substitution, isolation, or ventilation to reduce exposure to chemical hazards and the injury or illness caused by such exposure.

ENVIRONMENTAL MONITORING: Type of administrative control that involves collecting, measuring, and analyzing air or wipe samples of chemical substances to determine whether a hazard exists, or whether a known hazard is being effectively controlled.

EXPLOSION-PROOF: Apparatus enclosed in a case capable of withstanding an explosion which may occur within it and of preventing the ignition of a gas or vapor surrounding the enclosure by sparks, flashes, or explosion and which operates at such an external temperature that a surrounding flammable atmosphere will not be ignited.

EXPLOSIVE: Chemical material that can undergo a sudden and violent release of pressure and heat.

EXPOSURE LIMIT: The maximum amount of chemical in a given volume of air to which workers may be exposed, as averaged over a specified period of time. Most people can be exposed to this airborned limit for an entire working lifetime without developing health effects.

FIRE HAZARD: Chemical material that ignites and burns easily, or that cause or supports fire in other materials, includes pyrophorics, flammables, combustibles, and oxidizers.

FIRST AID: One time treatment for minor scratches, cuts, burns, and similar injuries that do not ordinary require medical attention, plus any follow-up visits for observation. Such one time treatment and follow-up visits will be considered first aid, even if provided by the MTF. ANSI Standard Z16.4-1977 may be used in determining first aid cases.

FLAMMABLE LIQUID: Liquid having a flash point below 100 degrees Fahrenheit.

GAS: The fluid form of a substance which can expand indefinitely and completely to fill its container. Form that is neither liquid or solid.

GAS DETECTION MONITOR: A person designated, in writing, to test the atmosphere prior to allowing employees to enter confined spaces. This person will be capable (by education and/or specialized training) of anticipating, recognizing, and evaluating employee exposure to hazardous substances or other unsafe conditions in a confined space. This person shall also be capable of specifying necessary control and/or protective action to ensure worker safety.

HAZARDOUS CHEMICAL: A chemical which presents a health or physical hazard. Health hazards include carcinogens, irritants, sensitizers, corrosive, and reproductive toxins. Physical hazards include combustible and flammable liquids, compressed gases, explosives, oxidizers, organic peroxide, pyrophoric substances, and unstable or water reactive substances. A one month or less supply of routine household cleaning products or office supplies are exempt from labelling or inventory requirements of this document.

HAZARDOUS CHEMICAL INVENTORY: List of all hazardous chemicals known to be present in a given workplace; identify/name of chemicals is used on this list must match the identify/name used on the warning labels and MSDSs.

HAZARD COMMUNICATION PROGRAM: Written document that describes how an employer or facility compiles with all requirements of the Federal Hazard Communication Standard (29 CFR 1910.1200).

HAZARD COMMUNICATION STANDARD: Federal law developed by OSHA to reduce illness and injury caused by chemical hazards in the workplace, requires evaluation of chemical hazards and communication of hazard information to both employers and employees.

HEALTH HAZARD: Any chemical material that can cause illness or injury when a person is exposed by ingestion, skin or eye contact, skin absorption, or inhalation.

HOT WORK: Any work involving burning, welding, riveting, or similar fire producing operations, as well as work which produces a source of ignition, such as drilling, abrasive blasting, and space heating.

HOUSEKEEPING: An administrative control that involves containing and removing chemical hazards, e.g., vacuuming, proper storage and handling, prompt removal, and correct disposal of chemical wastes.

HYDROCARBONS: Any of a class of compounds containing only hydrogen and carbon as methane, ethylene, benzene, or acetylene.

HYDROGEN SULFIDE: A colorless gas which smells like rotten eggs. Dulls the sense of smell quickly; person may not be aware that he is breathing toxic concentrations. Frequently found in oil refining industry, sewage treatment, or wherever organic matter containing sulfur decomposes.

IMMEDIATELY DANGEROUS TO LIFE OR HEALTH (IDLH): Any condition which poses an immediate threat of loss of life; may result in irreversible or immediate-severe health effects; may result in eye damage; irritation or other conditions which could impair escape from the permit space.

INERTING: Displacement of the atmosphere by a nonreactive gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

IRRITANT: Any substance that will induce a local inflammatory reaction on immediate, prolonged, or repeated contact with living tissue.

ISOLATION: A process whereby the confined space is removed from service and completely protected against the inadvertent release of material by the following: blanking off (skillet type metal blank between flanges), misaligning sections of all lines and pipes, a double block and bleed system, electrical lockout of all sources of power, and blocking or disconnecting all mechanical linkages.

LOWER EXPLOSIVE LIMIT (LEL): The minimum concentration of a combustible gas or vapor in air (usually expressed in percent by volume at sea level), which will ignite if an ignition source (sufficient ignition energy) is present.

MATERIAL SAFETY DATA SHEET: Written or printed material concerning hazards and precautions of a hazardous chemical which is prepared in accordance with CFR 1910.1200(g).

MEDICAL MONITORING: Type of administrative control that involves physical examinations and/or lab tests to establish an individual's baseline health status and check the effectiveness of other controls to used to protect an individual from health hazards.

MONITORING: An administrative control that checks the effectiveness of other controls by analyzing air samples, wipe samples, and personal exposure levels; may involve medical monitoring.

OCCUPATIONAL ILLNESS: An abnormal physical condition or disorder that did not result from a single traumatic cause.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA): Federal agency within the Department of Labor that develops and enforces standards for workplace safety and health.

ON-DUTY INJURY: Army personnel are on duty when they are:

a. Physically present at any location where they are to perform their officially assigned work. On-duty also includes those normal activities that occur during workdays, e.g. lunch or coffee breaks.

b. Being transported by Army or commercial conveyance to perform officially assigned duties.

c. In a travel status because of temporary duty or a permanent change of station, but only during periods for which reimbursable expenses are authorized.

d. Participating in mandatory sports or physical training activities.

OXYGEN DEFICIENCY: Any concentration of oxygen with a partial pressure of less than 19 percent.

OXYGEN ENRICHED ATMOSPHERE: Any oxygen concentration greater than 25 percent at normal atmospheric pressure.

PERMISSIBLE EXPOSURE LIMIT (PEL): The maximum 8 hour time weighted average of any airborne contaminant to which an employee may be exposed. At no time shall the exposure level exceed the ceiling concentration for that contaminant as listed in 29 CFR 1910 Sub Part Z.

PERSONAL MONITORING: Type of administrative control that involves the worker's wearing a badge or other sampling device to measure exposure to a chemical hazard in the workplace.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Equipment that protects the individual who wears it by placing barrier between that individual and a hazard; includes protective eyewear, face shields and masks, gloves, boots, hats, clothing, and respirators.

PHYSICAL HAZARD: Any chemical material that can cause fire, explosion, violent chemical reactions, or other similarly hazardous situations.

PROPERTY DAMAGE: Includes real property (facilities and real estate), equipment or materiel where there is a cost to repair or replace.

PURGING: The method by which gases, vapors, or other airborne impurities are displaced from a confined space.

RESPIRATOR (Approved): A device which has met the requirements of 30 CFR Part II and is designed to protect the wearer from inhalation of harmful atmospheres and has been approved by the Bureau of Mines and the National Institute for Occupational Safety and Health and Mine Safety and Health Administrations.

APPENDIX C
ABBREVIATIONS

AMV	Army Motor Vehicle
ATVs	All-terrain Vehicles
CAIG	Centralized Accident Investigation - Ground
CFR	Code of Federal Regulations
COR	Contracting Officers Representative
DA	Department of the Army
DCA	Directorate of Community Activities
DHR	Directorate of Human Resoruces
DPW	Directorate of Public Works
DOC	Directorate of Contracting
DOD	Department of Defense
EAMC	Eisenhower Army Medical Center
FTX	Field Training Exercise
GSA	General Services Administration
HHIM	Health Hazard Information Module
HRD	Human Resources Directorate
SBSD	Signal Branch Safety Division
IH	Industrial Hygiene
MI	Military Intelligence
MOS	Military Occupational Specialty
MRC	Motorcycle Rider Course
MSDS	Material Safety Data Sheet
MSF	Motorcycle Safety Foundation
NCO	Noncommissioned Officer
NRC	Nuclear Regulatory Commission
NSN	National Stock Number
OSHA	Occupational Safety and Health Administration
PCE	Protective Clothing and Equipment
PMS	Preventative Medicine Service
POV	Privately Owned Vehicle
SOHAC	Safety and Occupational Health Advisory Council
SOHI	Safety and Occupational Health Inspection
SOP	Standing Operating Procedure
TRADOC	U.S. Army Training and Doctrine Command
UCMJ	Uniform Code of Military Justice
WBGT	Wet Bulb Globe Temperature